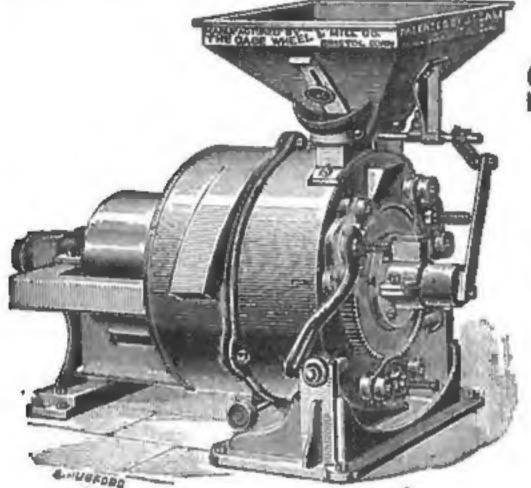


PUBLISHED EVERY MONDAY MORNING.

VOL. XXI. No. 12.

BUFFALO, N. Y., NOVEMBER 18, 1889.

\$1.50 PER YEAR.



VICTORY OVER ALL OTHERS.

SINGLE & DOUBLE VERTICAL GRINDING MILLS.

FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

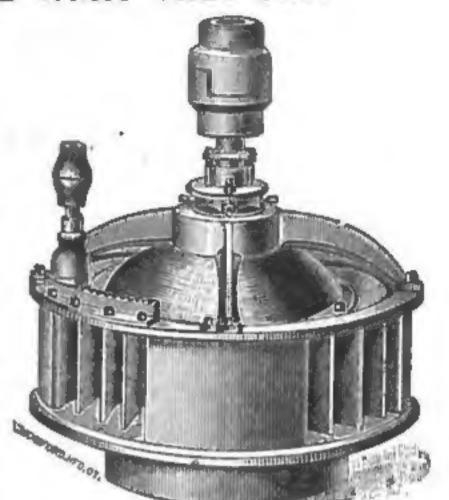
"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. Russell & Co., Meriden, Conn.
"Superior to any mill in use."—Geo. Weston, Bristol, Conn.
"The best satisfaction in quantity and quality."—Child's Elevator, Manchester, Ct.
"We take pleasure in recommending it."—Garland, Lincoln & Co., Worcester, Mass.

SEND FOR CATALOGUE-ILLUSTRATED AND DESCRIPTIVE.

The Improved National Turbine Water Wheel

The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUN-DRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.





WE BUILD THE MOST EXTENSIVE

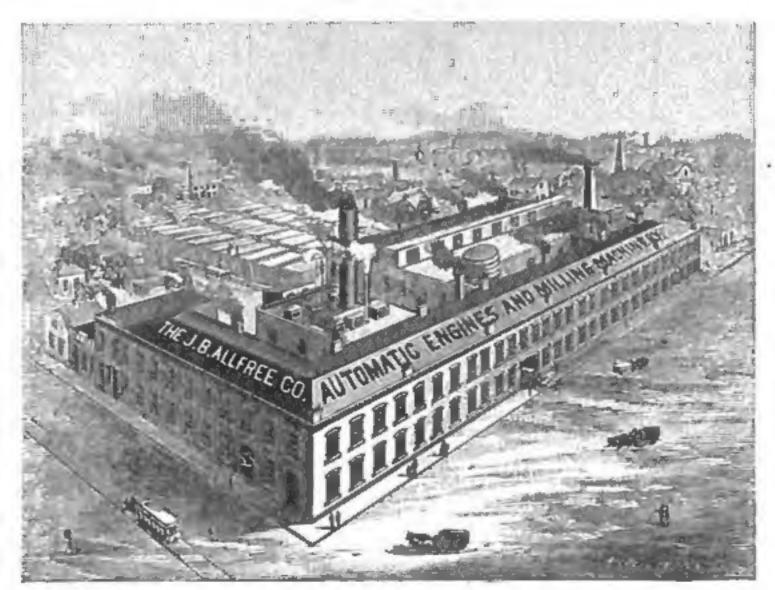
-LINE OF-

Flour Corn Meal Milling Machinery America

LONE JACK, Mo., Dec 12, 1888. THE J. B. ALLFREE CO.

INDIANAPOLIS, IND.

GENTS: Yours of the 5th inst. at hand. We are glad to answer any inquiries in regard to the mill you built for us. We are glad to say we have one of the best little mills in Western Missouri; our flour will compete with any in the market. From a test of 72 bushels of 58-lb. wheat we made 41 pounds of high grade and 1 47-72 pounds of low grade. Our clean up



is as good as we ask. Your roller mills, in our judgment, are superior to any. Your "Success" bolts and · Centrifugals give perfect satisfaction. We have not seen as light or smooth running machinery as yours. Our business has been improving since the day we started; we are getting custom right from the neighborhood of other roller mills. We are well pleased and are glad we placed our order with you. Wishing you success, we are NOAH HUNT & CO.

FLOUR MILLS. CORN MILLS. HOMINY MILLS.

Our machines are constructed of the best material and workmanship that can be procured. Address for catalogue, etc.,

The J. B. Allfree Co., Indianapolis, Ind.

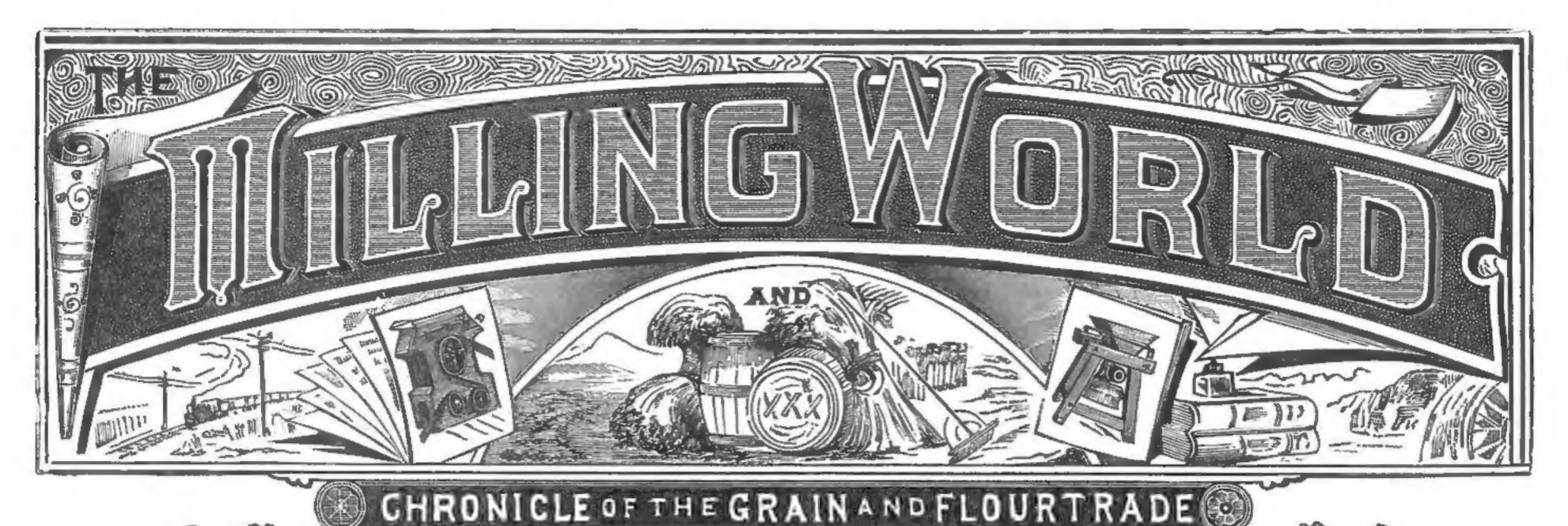
CASE.

CLEVELAND, TENN. AUG. 20.

Would them. Columbus, the best toll on earth and the remains the desire to build a hundred to the permanent are the best toll on the family.

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CASE.



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Russian wheat exports continue to dwindle, despite the efforts of the British grain-handlers to coax the grain out of that country. The Indian exports appear to be decreasing very rapidly, also, and now, in the year which was to "see Great Britain finally and permanently independent of the United States as regards a supply of wheat," Great Britain is likely to be forced to draw an unusually large supply of wheat from the United States. Enumerating poultry anterior to its successfully achieved incubation is generally recognized as an exceedingly unsatisfactory business occupation.

THE Interstate Wheat Growers' Association demagogues assert that, if the American growers of wheat will unite to hold their wheat, they can force European buyers to pay their price for the grain. The proposition reads beautifully. Suppose, however, the European buyers were to unite and refuse to take the American wheat at any price. What would then become of the trust? Suppose the American flour-makers, alarmed at the prospect of having to pay the trust too high a price for wheat, should imitate the trust, shut down, sit down, and wait for the trust to unload at their leisure. What would become of the trust? Norman J. Colman has never shown his fitness to manage the universe, and he may just as well attempt to control the laws of gravitation as to control, or annul, the laws of demand and supply.

MILLERS will be interested in the details of the decision in the case of the Consolidated Roller Mill Company against the George T. Smith Middlings Purifier Company, the full text of which appears on another page in this number of THE MILLING WORLD. Our correspondents, who are asking for information concerning these roller-mill cases, will understand that it is out of the question for us to attempt to answer their questions. The contestants do not care to publish their cases, and it is only after the courts have passed on the questions at issue we can give the details. Up to date the chief intention openly expressed is that of the Consolidated, which claims to control or own 'all the roller-mills of any importance in the United States," and they propose to push that claim to its logical end. The opponents of that company are not proclaiming their intentions from the house-tops, but it is quite certain that they do not propose to let things go by default.

Protective tariffs are all right, both in theory and practice, when properly administered, but when they are juggled and hoodooed, as in Canada, for instance, in the case of the duties on wheat grain and wheat flour, so as to work a direct and positive injury to the Canadian millers, they are a costly farce and an intolerable fraud. The flour-makers of the Dominion are for the second consecutive season forced to handle poor wheat grown in Ontario, or dear wheat grown in Manitoba, while the inequitable grain and flour duties really constitute a premium on imported American flour. The result is disastrous to the important flouring interests of Canada. Every barrel of American flour sent into Canada means the intrusion of about five bushels of American wheat pushing out the same quantity of Canadian wheat, and it is

small wonder that the Canadian wheat growers and millers complain of the situation. Evidently politics in the Dominion are quite as ridiculous as the Canadians are forever asserting American politics to be.

EVERY individual in the United States, who is in any way interested in wheat, seems to be taking a hack and a whack at Statistician Dodge. That much hacked and whacked gentleman may not be omniscient, indeed, he does not claim to be, and a good portion of the abuse showered upon him is unreasonable in the extreme. In spite of all that is said about his reports, they have generally been much nearer the truth, so far as wheat is concerned, than any of the so-called reports of the other so-called "experts" who have manipulated crop figures for several years. Esteemed cotemporaries, hammer Statistician Dodge as much as he deserves to be hammered, but be fair enough to acknowledge that the government reports on crops are far above all others in accuracy.

Every miller in the United States will read with interest the description of the latest German "milling revolution," the "Gegenflachen Sichter," which appears in this number of THE MILLING WORLD under "Points in Milling." If this new dressing-machine is all that its inventor, Mr. Eugene Kreiss, of Hamburg, Germany, claims that it is, he may well call it a "complete revolution in milling." There have been so many of these "milling revolutions" announced, which failed to revolutionize milling, that American millers will be slow to believe that the "Gegenflachen Sichter" is a success until it has met and vanquished the best of the American machines devoted to the same work. We hope to hear, at an early date, of a test of the new German machine in competition with the standard dressers now in use. Such a test will establish its superiority and insure its adoption, or show its inferiority and cause its rejection. Such a test is inevitable, as the inventor makes very broad claims of superiority. He must sustain his claims or go to the wall.

Figures never lie? Canadian boomers are yet found who assert that the Manitoba average of wheat is 32 bushels to the acre. In 1888 that province sowed about 500,000 acres to wheat. The crop was anywhere from 8,000,000 down to 5,000,000 bushels. In 1889 the acreage sowed to wheat was about 565,000 and the crop is anywhere from 7,000,000 down to 4,000,000 bushels. This season the Manitobans themselves have abandoned the claim of 32 bushels to the acre and substituted the very modest average of 12 bushels instead. Now that the Manitobans are telling the truth about their province, outsiders, in other parts of the Dominion, have no excuse for further falsification. And, while confessing 12 bushels instead of claiming 32 bushels of wheat to the acre in Manitoba, our Canadian friends might prudently refrain from making imprudent and suggestive comparisons between "prosperous Manitoba," with her 6,000,000-bushel crop, and "starving Dakota," with her 44,000,000-bushel crop of wheat. The boom that blooms in the far Northwest is oft, too oft, by the frost caressed, and the figures on crops, that soar too high, are sure in the end to be labeled "lie."

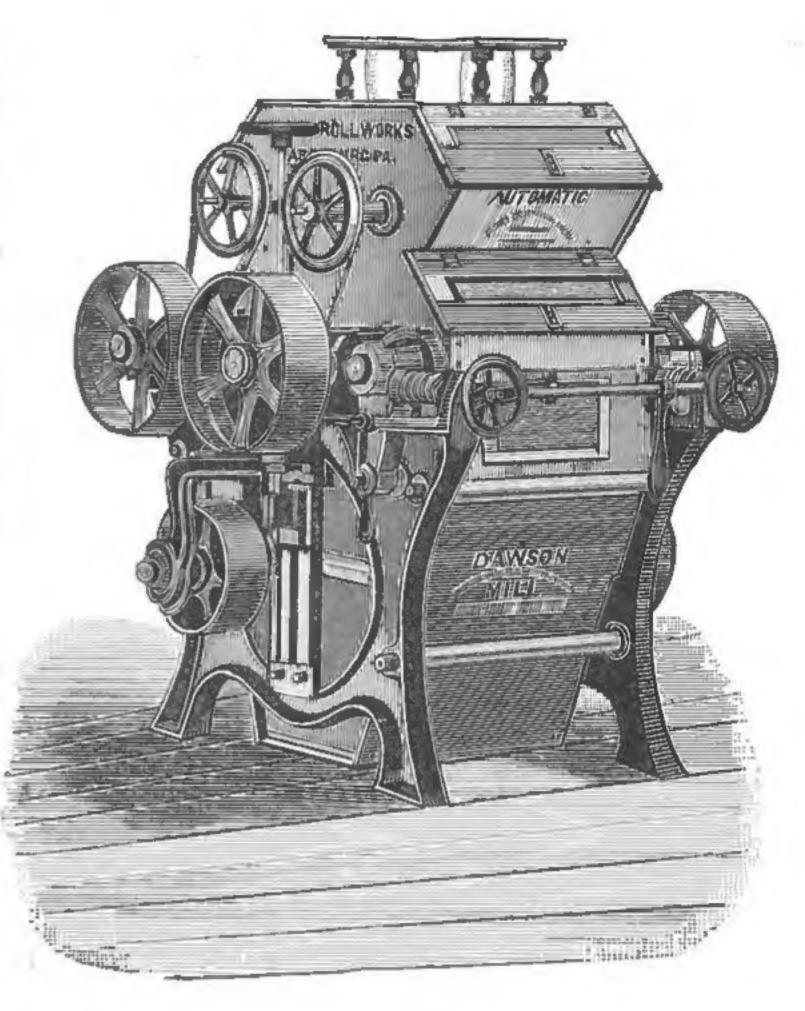
Dawson's Roller Mill

Is acknowledged to be the very best in the market. It has our Patent Automatic Centrifugal feeder, never failing to feed the stock the full length of rolls in an even sheet. It is the Latest and Best feed out, uses less power and is simple in construction. It can be placed on any style of machine with little expense. We use for roll bearings phosphor-bronze metal which will admit rolls being run at any speed without heating and with little friction, and uses little oil. We use the Dawson Corrugation, which is admitted the best in long or short system mills as the action is granulating rather than CUTTING.

We have a large plant to Re-grind and Re-Corrugate Rolls.

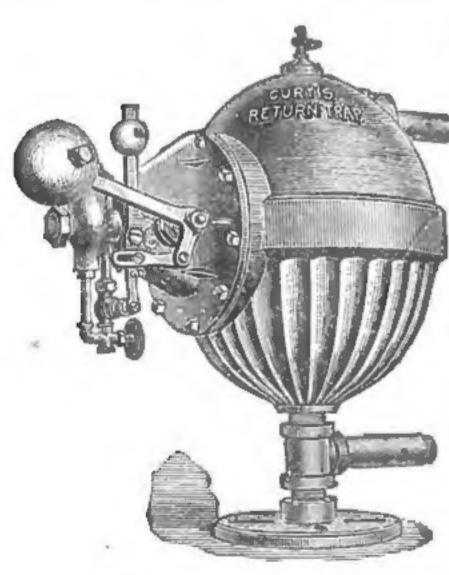
Owing to our late increased facilities and central location we are enabled to ship goods promptly on the shortest notice.

PARTIES CONTEMPLATING REMODELING THEIR MILLS OR BUYING ANY ROLLER MACHINES ARE REQUESTED TO PUT THEMSELVES IN CORRESPONDENCE WITH US.



FOR PRICE LISTS AND CIRCULARS, ADDRESS,

Dawson Roll Works, Harrisburg, Pa.



PATENT RETURN STEAM TRAP.

T is noiseless, positive, rapid, will return all condensation back into the boiler, and works equally well in connection with reduced pressure or exhaust steam, also when the return is below the water line of the boiler.

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Filing Drawers.

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L. L. WHITLOCK,

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FOR MANUFACTURERS.

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P. O. DRAWER 5323. Boston, Mass.

As Agent for Advertisers instead of Papers, I obtain the Best Rates Possible for my Customers.

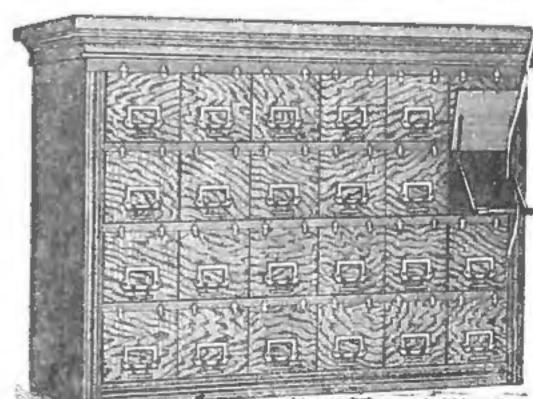
The Canton Cabinet Filing Case Company, Canton, Ohio.

MANUFACTURERS OF

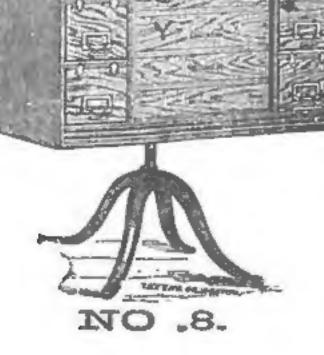
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10. 1 Represents one of our small Document Cabinets, for use on desks or brackets. Action of drawer can be seen in the cut. When front is raised inner drawer comes forward, exposing contents of drawer for inspection.

Our Cabinet Files are Conceded to be the Most Convenient of Any in the Market. They are Compact, Simple, Complete, Durable and Ornamental.



NO. 1.





OFFICES: { Corner Pearl and Seneca Streets, Over Bank of Attica. PUBLISHED EVERY MONDAY.

McFAUL & NOLAN, - - - PROPRIETORS. THOMAS MC PAUL.

JAMES NOLAN.

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In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk. To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year,

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Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application.

Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertise-ment taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD. BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

WANTED.

Situation wanted by a Miller of 9 years' experience, 24 years of age, of steady habits and willing to work. Address, H. care of The Milling World, Buffalo, N. Y.

WANTED.

Western New York, Ohio and Pennsylvania mills in want of a temperate miller, with 20 years experience, should write to the undersigned, who is now running a first class mill, but would like to make a change this fall. Address, W., care of The MILLING WORLD.

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents. tor four insertions. Cash must accompany the order. When replies are ordered sent care of this office, 10 cents must be added to pay postage.

FOR SALE.

Merchant and grist mill, The best water-power in Ohio. Situated five miles from Mentor, Ohio. For particulars enquire of C. S. JOHNSON, West Mentor, O. 1216

SITUATION WANTED.

As miller, by an active young man, used to rolls and stones. Strong, willing and not afraid to work. Best of references. Address 'E. N.," 109 East Eagle street, Buffalo, N. Y.

FOR SALE.

Several good second-hand and new turbines of various styles. Second-hand price list and descriptive matter and prices of our new machines sent free. Every one interested in the shortest route to successful milling on rolls or in grinding corn and feed with the least expense of power, should address us before buying.

8tf

FLENNIKEN TURBINE CO., Dubuque, Iowa.

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make. One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12

bushels per hour; new, best make. One 14-Inch Vertical Feed Mill; best make, new, a bargain.

One No. 6 Dustless Separator; new, a bargain. One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.

Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.

Three No. 1 Corn Shellers, capacity 200 to 300 bushels per hour; new.
One No. 2 Purifier. New. Best make. A bargain.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y.

M-I-L-E-R-S

Wanting Bolting Cloths should write for discounts on same before purchasing elsewhere to

SAMUEL CARE

17 Broadway New York.

FOR RENT.

Clinton Mills, at Black Rock, Buffalo, for rent on reasonable terms, recently repaired and put in good order. Apply to CHAS. DANIELS, over 311 Main Street, Buffalo,

FOR SALE.

Full roller mill, 100-bl. steam power; also, a water power buhr mill, dwelling and ten acres of land. Prices low on either and terms easy. Address, J. R. ENGLISH, Piketon, Ohio.

WANTED.

A miller who can purchase an interest. Business rapidly increasing. Must enlarge mill and add machinery. Only mill in this, Gray's Harbor, region. Good water-power. Address, REV. HIRAM F. WHITE, Elma, Chehalis County, Washington Territory.

GRIST MILL.

For sale or to rent, s'tuated at South Plainfield, one eighth mile from Lehigh Valley R. R. Station. Two miles from Plainfield, N. J. Has an overshot wheel, with three run of stone, with necessary machinery, never-failing stream, considered the best in the State for its size. For suitable tonant may put in a roller system. Ice pond capable of furnishing 20,000 tons per annum. Apply to C. BRAKER, Jr., 215 Pearl Street, New York.

During the first nine months of 1889 the imports into the United States included \$191,928,221 in articles free of duty and \$390,890,230 in dutiable articles, a total importation of \$582,818,451, against a total of \$544,588,166 for the corresponding months in 1888 and \$535,824,664 in 1887. For the nine months of this year the total exportations from the United States amounted to \$529,558,161, against \$445,355,256 in 1888 and \$481,464,674 in 1887.

In this number are presented two interesting articles on the roller-mill patent litigation that has been attracting so much attention recently. The J. B. Allfree Company give a spirited address to the millers of the United States, which will repay persual by every user of roller-mills. Evidently the Consolidated Roller Mill Company is not finding smooth sailing all the time. Thousands of millers are interested in the litigation, and they all resent the claims of the Consolidated. The end is not yet.

CERTAIN esteemed European cotemporaries have deluded themselves into believing and are constantly asserting that "the Yankees are greatly disturbed over the large investments of British money in the United States." The idea is an error. The assertion is a falsehood. The Yankees are perfectly contented to have British money, or any other foreign money, invested in the United States. We welcome it all, every dollar of it. Let it come. The more, the merrier. We have long been drawing wealth-producing labor from Europe, and now we shall not object to drawing wealth in the produced and concrete form of money. We can utilize the British money and can afford to return a handsome dividend to the lenders. It is no trouble, no grief, no burden, no inconvenience to us at all. Let the golden tide roll in.

HARDLY is the announcement made that the British syndicates have succeeded in gaining control of the Minneapolis flouring-mills, ere it is announced that the operators of one of the sold plants, the Washburn-Crosby, will start in business in some other locality. It is said that they will locate and build a 6,000-barrel mill either in Duluth, Minn., or Niagara Falls, N. Y. That announcement means the addition of over 2,000,000 barrels a year to the flour-producing capacity of the United States. What do the anxious British purchasers of the Minneapolis plants think of the prospect? Of course it is impossible to hinder the sellers from re-engaging in business wherever and whenever they may choose, and it is an open question whether any of the mill-owners, who have sold or who may yet sell to British investors, propose to remain out of business for any length of time. Certain points in the business situation combine to render a number of places better for great milling plants than Minneapolis now is, and it is barely possible that a thorough appreciation of that fact was one of the most potent influences in making the owners of the Minneapolis plants willing to sell. Possibly the British investors have not "sized up" the situation so accurately as they might have done. In any event, if the deep-tunnel projects at Niagara Falls are carried through, that town will be able to offer very great inducements to millers. Minneapolis may fail to prove a genuine Land of Promise to the British investors.

POINTS IN MILLING.

Following is a description of the "Gegenflachen-Sichter," or counter-face scalping and dressing machine, recently brought out by Eugene Kreiss, of Hamburg, Germany. The machine consists of a strong wooden frame, with two chests, containing the vertical sieve frames and surfaces. These chests make the same or counter movements, swinging to and from the center of the machine. They move either against the middle or in the opposite direction, thereby preventing any vibration. The chests are guided in iron rails, and they are moved very quickly by an eccentric shaft and bars. The shaft has four eccentrics, two for each chest, four bars and two swinging wheels, one of which is at the same time the driving-pulley, of two diameters, for different speeds. The material is fed to the machine by a distributing sieve, situated above the vertical sieves in each chest, and it is thrown in a zig-zag fashion from one surface to the other as it descends. The shaft runs at 800 or 900 revolutions a minute, or less. The good heavy particles of flour are thrown against the silk, while the light impurities remain suspended in the air. The inventor claims that the flour produced is of a very superior quality.

The vertical sieve frames, between which the flour descends, are divided by three inclined bottoms into three compartments, and the flour flows through openings in the side walls of the chests and sieve frames into lengthwise channels, and finally on to the end of the chest, where it is discharged, the tailings falling out from the inclined bottoms of the chests. The feeding and traveling of the material are effected by the shaking motion of the inclined channels. There are three outside channels on each side of the chests, one above the other, and hence each chest gives three grades on each side, with a fourth as tailings, making in all eight grades per chest from the one material. The three or six outside channels communicate with two vertical tubes, so that, at the choice of the operator, the three or the six grades may be mixed or drawn off separately.

The front sieve, when used for "breaks," has three horizontal sieve frames in each chest, giving two grades each, namely, the next break and coarse middlings. Each chest gives, as required, up to ten separations, and the whole machine gives 20 separations. The machine may also be used for two different products, and each chest for two products, by a division placed lengthwise. The sifting effect may be regulated by using a distributing sieve, of suitable perforation, and using more or less of the whole silk surface, by placing a simple wall or division above the distributing sieve, or by using different eccentrics. The normal eccentric, or throw, is 30 millimeters, equal to about 1 inch.

The dressing increases the faster the machine runs, and as the material falls down in a zig-zag fashion, only one surface is sifting, the counterface creating a suction wave of air, which is still increased by the pressing air wave of the sifting surface. The dressing is thus effected against air currents, or air pulsations—wind waves—which retain the bran and impure particles. Each chest has six sieve frames, each of which has about 1½ square meters of free silk surface. The whole machine, both chests, therefore, contains 18 square meters of silk surface; the whole length is 4½ feet, the width 2½ feet, and the height about 5 feet. The machine is driven by a 2-inch belt and requires less than ½ horse-power; the capacity per hour is about 50 hundredweights, and even much more, according to the nature of the material and the requirements.

The inventor states that the "Gegenflachen-Sichter" is suitable for every kind of milling, from the highest to the lowest style of grinding. He has patented the machine in the following named countries: Germany, Austria-Hungary, Russia, Poland, France, Belgium, Italy, Sweden, Denmark, Norway, Switzerland, Luxemburg, Spain, Great Britain, United States of America and Canada. Mr. Kreiss says that it has been tested continuously since January, and has been

improved, so that it is now offered to millers as effecting a complete revolution in milling.

Mr. Kreiss sums up the advantages of the "Gegenflachen-Sichter" as follows: 1. Largest capacity, because (a) largest sieve-surface in smallest space, and (b) the whole surface utilized; (c) the capacity proportional to the speed, (d) which is much higher than in horizontal sieves, and (e) the material is very finely distributed, mixed with air, so that all of it in the best manner touches the silk as frequently as possible. 2. Superior quality, as it is bolting on a perfect principle, retaining the impurities, purifying the flour by air pulsations, and giving sharp flour, as coarse particles are thrown through the meshes and do not slide upon the silk. 3. As a flour-dresser or flour purifier the machine is quite a new thing. 4. Absolutely clean tailings, which is a very important point. 5. A much larger percentage of fine flour. 6. No clogging of cloth; the only machine which has overcome this evil. 7. No material wear of the silk, which is not charged by the material, but the latter is suspended in the air. The silk will last for years. 8. Very gentle action upon the material. 9. The power to drive is almost nil, as it is hardly one-tenth horse-power per machine. The power saving is therefore about 95 per cent. against most other machines. 10. Can be applied to any material with equal results. 11. Replaces a complete system of scalpers, graders, flour dressers, centrifugals, etc. 12. Utmost simplicity of construction and operation of the machines. Easy changing of sieve frames. 13. Enormous saving in space, 75 per cent. or more. 14. No dust, no loss by dusting. 15. No wear, no costs of repairs. 16. No cost of erection, as the machine is complete and ready to work. 17. Saves in shafting, etc., as the power to drive is very little, and the machine very small, so that shafting can be shorter; also saves in belts, lubricating, etc. 18. Less danger of fire or dust explosions, which often pass through reels and centrifugals. 19. Milling process can be shortened. 20. The low price compared with the capacity and advantages. 21. Great saving in first plant cost and general expenses. 22. No vibration; the machine stands like a centrifugal and is quieter in working than a purifier.

FULL TEXT OF AN IMPORTANT DECISION.

Following is the full text of the decision made by Judge Brown, in the United States Circuit Court, eastern district of Michigan, on October 7, 1889, in the case of the Consolidated Roller Mill Company against the George T. Smith Middlings Purifier Company, on motion for preliminary injunction: This was a bill in equity to recover damages for the infringement of letters patent No. 222,895, issued to William D. Gray, December 23, 1879, for an improvement in roller grinding-mills. The invention covered by the patent was stated in the preamble to consist "in a peculiar construction and arrangement of devices for adjusting the rolls vertically as well as horizontally, whereby any unevenness in the wear of the rolls, or in their journals or bearings, may be compensated for, and the grinding or crushing surfaces kept exactly in line," and also "in the special devices for separating the rolls when not in action, and in other details." The defense raised upon this motion is fully stated in the opinion of the court.

George H. Lathrop for plaintiff.

Parker and Burton for the defendant.

Brown, J.: A preliminary objection in the nature of a plea of res adjudicata is taken by the defendant against the issue of this injunction. Prior to the opinion of this court in the case of the Consolidated Roller Mill Co. vs. Coombs, 39 Fed., Rep. 25, sustaining the validity of the plaintiff's patent, a bill had been filed in the Western District of Wisconsin by one Allis against Freeman, to compel the defendant to desist from using a machine which was claimed to infringe several patents, among which was the Gray patent upon which this suit was based. A decree was made dismissing the bill, and it would appear from a letter of the learned judge to the solicitors, put in evidence in this case, that the court was of the opinion that the Gray patent had been an-

ticipated by an English patent to one Lake and hence was invalid for want of novelty. It appeared that plaintiff in that case claimed and perfected an appeal to the supreme court from this decree, and the cause was docketed in that court in October, 1887. Subsequently this appeal was dismissed upon the motion or by the consent of the appellant.

Had the opinion of the court in that case been called to our attention at the time the Coombs case was argued, it is quite probable that, out of the usual comity obtaining among courts of co-ordinate jurisdiction in this class of cases, we should have waived our own views and deferred to it, so far at least as it covered the issues involved in that case. It seems, however, that the reason for dismissing the bill in the Wisconsin case was not then known, and no stress was laid upon it in the argument of the Coombs case. Having expressed our own opinion of the patent in that case, it is now too late to claim that as a matter of comity we ought to follow the Wisconsin case. It is equally clear that it does not create a case of estoppel. Not only is no record produced showing upon what ground the bill was dismissed, but neither the plaintiff nor defendant in this suit were parties to that.

A decree declaring the invalidity of the patent is in no sense a proceeding in rem and does not prevent the same or a different plaintiff from prosecuting a suit against another defendant and establishing its validity upon different, or even upon the same evidence. This precise thing was done in Ingersoll vs. Jewett, 16 Blatchford, 373, which was also a bill in equity for the infringement of a patent. In defense it was argued that the plaintiff had previously filed a bill against different parties for an infringement of the same patent, the defense of which had been assumed by one Topham, under whom the defendants in that suit, as well as the defendants in the suit under consideration, were licensees. It was held by Judge Wallace that, assuming that Topham was a party to the former suit, the defendants could not avail themselves of the decree in his faver, upon the ground that there was a want of mutuality in the estopped. same ruling was made by Justice Blatchford in respect to the same decree in the United States Stamping Co. vs. Jewett, 18 Blatchford, 460. The facts of the present case are much more conclusive against the estoppel, as neither of the parties to this suit were parties or privies to the case of Allis vs. Freeman.

In the case of the Consolidated Roller Mill Co. vs. Coombs, 39 Fed., Rep. 25, we had occasion to consider the Gray patent in issue in this case and came to the following conclusions: 1. That it had not been anticipated by the Lake or Nemelka patent, or by any other of the devices offered in evidence, and that the second, third, fourth and fifth claims were valid. 2. That the patentee was not debarred from the benefit of the doctrine of mechanical equivalents by the fact that his original claims for a combination of a vertical and horizontal adjustment by any method had been rejected by the patent office, and he had accepted restricted claims in their place. 3. That the Mawhood machine, containing as it did all the elements of the patentee's combination, though differently arranged and located, and with a lever of a different order, was an infringement of the Gray patent.

It was not, however, intended to decide that the Gray patent covered all methods of horizontal and vertical adjustment, or methods of making such adjustments by means essentially different from those employed by the patentee. Indeed, this could not have been done without disregarding the limitations put by the Patent Office upon the original claims, as well as the state of the art as it existed at the time the patent was issued. Other methods of adjusting rolls both vertically and horizontally existed before Gray filed his application, and in at least one there was a combination of both adjustments as applied to the same roll. That the defendant has produced a machine which accomplishes the same results as the plaintiff's will not be seriously disputed, and the only question is whether it has accomplished them by the same or by an essentially different device. These results are four in number: 1st. A vertical adjustment at each end of the movable roll. 2d. The horizontal grind-

ng adjustment by which the distance between the two rolls is kept precisely the same while the rolls are in operation. 3d. A spring device by which the rolls are made to yield to a breaking strain whenever a nail or other hard substance enters between them. 4th. A stop and holding device by which the rolls are spread apart when in operation and are thrown together again without a new adjustment.

To accomplish these results the patentee makes use of, first, two rolls, one of which is fixed and the other adjustable. His specifications also seem to contemplate that both rolls may be made adjustable, but in what manner is not stated. Indeed, it is difficult to see how this could be done without taking away from the combination devices applied to the other roll, some one of the elements which would destroy the integrity of the combination. Second, an upright swinging arm at each end of the adjustable roll upon the pivot of which the roll is moved in a vertical direction. Third, a rod G, at one end of which are devices for the grinding adjustments and a spring urging the upper end of the arm inward, but yielding to a breaking strain, and at the other end the stop and holding devices for the spreading adjustment. In defendant's machine both rolls are adjustable. To one is attached the spring and a nut and eccentric for vertical adjustment, and to the other the grinding adjustment and the stop and holding devices. There is no lever or swinging arm, but the journals of both rolls rest upon horizontal shafts, one of which may be raised and lowered for the vertical adjustment, and the other of which slides forward and back, carrying the second roll to and from its fellow. There is no rod G fitted at either end with the several devices for horizontal adjustments, and nothing properly corresponding to it, since the shaft attached to one of defendants' rolls corresponds about as nearly with it as the one attached to the other.

If we were to attempt to locate it, we should have to say that it was divided into two separate parts, by one of which the vertical adjustment is accomplished, while in plaintiff's patent this adjustment is made by means of a swinging arm and not by means of the rod. This rod and the upright swinging arm we regard as of the essence of the plaintiff's patent. Should defendant's device be adjudged an infringement, we should not know where to draw the line providing the defendant's device accomplished the four results. This, evidently, was not the scope of the Gray patent, since the original claims for the combination of these adjustments had been rejected by the commissioner. While the sliding support might be, under certain circumstances, a mechanical, equivalent for the swinging support in view of the state of the art, and the limitations upon plaintiff's claims, we can not consider it so in this case. Under the view we have taken we find it unnecessary to consider the claims separately. The departure of the defendant's machine from the underlying theory of the plaintiff's is too radical to require us to descend to details. We are clear in the opinion that the injunction should be denied.

NEW YORK IDEAS OF WHEAT GRADING.

According to a recent report from the city of New York, considerable interest has lately been shown on the Produce Exchange on the subject of the grades of wheat. A private dispatch received by a leading house announces that in grain circles in Baltimore a movement is being agitated to establish uniform grades of wheat in all the markets throughout the country. On the New York Exchange the prevailing sentiment unmistakably is to regard the scheme as entirely visionary and impracticable, and it is safe to say that unless the grades of wheat at New York are accepted as the standard the New York Exchange will not become a party to the movement. On the other hand Chicago, it is generally believed, would adopt the same position as New York, and it is very doubtful whether any benefit would accrue from establishing standards of grades that would hold good in all the markets except the two chief ones.

Mr. Henry Kneeland, the Chairman of the Committee on Grain, declared that the scheme was entirely a dream. "It is," he continued, "altogether impracticable and can never

amount to anything. It is obvious that the grades of wheat in any given market must be established in accordance with the wheat received at the market. It would, for instance, be impossible for Kansas City and Detroit to have the same grades of wheat, because climatic conditions, the color and the general characteristics of the wheat itself differ very materially. In the same way the grades of wheat in Chicago are different from Toledo, as these markets each draw from different sections of the country. Cincinnati, furthermore, requires a different grade altogether. The reason why much criticism in the past has been ignorantly made in regard to the grades of wheat on the New York market is on account of the mixing of different grades together. This mixing is necessary, because New York is the final market and can not have a grade even substantially like any other market. It is absolutely impossible to have a standard grade throughout the country. Some years ago an effort in the same direction was made and it was found to be impracticable. At the time the effort was made I told the gentleman who was Chairman of the Grain Committee at that time that, sooner than have a uniform standard or grades of wheat throughout the country, I would rather abandon altogether the system of grading at the seaboard, and I still hold these views. The scheme is chimerical and if tried it would injure trade instead of helping it."

Mr. George Martin, who was Chairman of the Committee on Grain when the effort referred to by Mr. Kneeland was made to establish the uniform grades, was called upon. He said in reply to questions: "Yes, I was an earnest advocate of the plan when I was Chairman of the Grain Committee. and I visited the different Exchanges of the country with a view of securing the adoption of the plan. Speaking now as a New York merchant, I shall oppose the scheme as strongly as I previously advocated it. At that time Chicago and Baltimore would hardly consider the scheme, and Chicago, I am sure, holds the same views now. Baltimore, on the other hand, I understand, has changed her attitude entirely. New York has naturally become the shipping port of the Atlantic seaboard, and Baltimore has to a very considerable extent lost her trade and is now willing to do any thing that promises to help her regain some of it, and is consequently very anxious to have the grades established. Some of the smaller Exchanges, when I called upon them, expressed a willingness to try the scheme, and probably they would do so now; but it is evident that without the co-operation of New York and Chicago the scheme must prove a fizzle."

Other leading Exchange members were also called upon, and they expressed in substance the same views. The grades of wheat in New York are established each season by the Committee on Grade of the New York Produce Exchange. The highest grade of winter wheat is extra white, which must be bright, sound, dry, plump and well cleaned. Next comes No. 1 white, which is sound, dry and reasonably clean. No. 2 white consists of sound white winter wheat unfit to grade No. 1, and No. 3 white consists of sound white winter wheat unfit to grade No. 2. No. 1 red winter wheat must be sound, dry, long berried and well cleaned. No. 2 red, which is the contract wheat, must be sound, dry and reasonably clean, weighing not less than 581 pounds, Winchester standard, and shall not contain over 10 per cent. white wheat. No. 3 red consists of sound winter wheat unfit to grade No. 2 red. "Extra Red" is sound, dry and clean, weighing not less than 591 pounds to the measured bushel, Winchester standard. No. 4 winter wheat includes all sound winter wheat unfit to grade No. 3 red. Mixed winter wheat includes all white and red mixed, and is equal to No. 2 red in all other respects. Wheat which is equal in all respects as to quality to the above grades, but which is slightly soft or damp, has the word "steamer" prefixed to the grade. Rejected winter wheat shall include all merchantable winter wheat unfit to grade No. 4.

In spring wheat the grades are as follows: No. 1 Northwest spring must be sound and well cleaned, and weighing not less than 58½ pounds to the bushel. No. 2 Northwest spring must be sound and resonably clean, and weighing

not less than 561 pounds to the bushel. No. 3 Northwest spring must be sound and reasonably clean, unfit to grade No. 2, but weighing not less than 53½ pounds to the bushel. The grades of Northwest wheat include such wheats as are grown in the Northwest, and to correspond, as far as practicable, in color and general character with the Milwaukee and Duluth grades. Spring wheat, No. 1, must be sound and well cleaned, and weighing not less than 581 pounds to the bushel. No. 2 spring must be sound and reasonably clean, and must not weigh less than 561 pounds to the bushel. No. 3 spring must be sound and reasonably clean, unfit to grade No. 2, but weighing not less than 531 pounds to the bushel. Hard spring wheat, No. 1, is sound, bright and well cleaned, contains not less than 75 per cent. of hard Scotch fife, and weighs not less than 58 pounds to the measured bushel. No. 1 Northern spring wheat must be sound and well cleaned and must contain not less than 50 per cent. of the hard varieties of spring wheat. It is understood that the minimum test weight of this grade shall not be less than 57 pounds to the measured bushel. No. 2 Northern spring wheat must be sound, reasonably clean and of good milling quality. This grade includes all wheat not suitable for the higher grades, and must weigh not less than 56 pounds to the measured bushel. Rejected spring wheat includes all merchantable spring wheat unfit for No. 3. State wheat shall be sound, bright, well cleaned and free from any damaged or sprouted wheat. "State white wheat" is intended to include New York State wheat.

THE ROLLER MILL LITIGATION.

Herewith is presented a communication from the well-known J. B. Allfree Company, of Indianapolis, which will be found an interesting contribution to roller-mill patent litigation literature:

Indianapolis, Ind., November 12, 1889.
To the Editor of The Milling World, Buffalo, N. Y.

A case before the courts, not yet completely adjudicated, appears to us to be an improper subject for journalistic controversy. We have, therefore, refrained from saying anything publicly as to the pretended claims of the Consolidated Roller Mill Company, but as that company has made unwarranted use of the situation, misrepresenting the true state of the case and trying to intimidate every miller who is not using their roller-mills, and as our customers have repeatedly solicited our views in relation to these claims, we now feel at liberty to defend ourselves and to expresss our views, which shall be done as briefly as possible. We have been silent, also, because we have been unwilling to think that a concern composed of gentlemen, who should hold business integrity too sacred to be tampered with, could willingly stoop to the deceitful and "bull-dozing" methods which their company appear to have adopted.

As the patent cases of the Consolidated Roller Mill Company have been pretty fully ventilated in the milling jour nals, we shall confine ourselves to the consideration of the facts and situation pertaining to the "Keystone Roller Mill," manufactured by our company under patents of which we have entire control. Our attention has been called to circulars and letters purporting to come from the Consolidated Roller Mill Company, representing that their patent has been sustained by the Supreme Court, whereas the only case in which either of their patents have been carried to the Supreme Court was disposed of adversely to them, the patent being held invalid below, and that action being confirmed by the dismissal of the appeal taken in behalf of the complainant. Our attention has also been called to circulars and letters, purporting to come from the same source, representing that the suits of the Consolidated Roller Mill Company had been uniformly decided in their favor, whereas the fact is that nearly every patent on which they have brought suit, and upon which their case has been heard, has been determined invalid; the only instance in which either of their patents has been sustained by any court being one in Detroit; that the same patent has been held invalid in another court of same jurisdiction, and this finding has been acquiesced in upon appeal to the Supreme Court and a final decree entered adverse to the patent, and that in a later case before the court in Detroit this patent has been held limited to specific constructions, which are not contained in the "Keystone Roller Mill."

The fact is that no suit has been brought against our company, and not a word of evidence ever taken charging the "Keystone Roller Mill" with infringing of any patent owned by the Consolidated Roller Mill Company or any other company. This fully shows their malicious disregard for truth and honest methods. It is evident, moreover, that their simply saying the "Keystone Roller Mill" infringes their patent does not make it so and does not constitute an infringement by any means. Infringements must be proven before a court of jurisdiction, and the court must render a decision to the effect that an infringement exists before that point is settled. Yet, without such decision to warrant it, they make false statements and couple with them a demand for money. Their reckless claims seem to be made with the hope of their being able to dupe a sufficient number of honest millers and through their fear of a lawsuit obtain a sufficient sum, if not to fill their coffers, at least to offset the expense of their malicious onslaught against innocent manufacturers.

We have observed that for the most part the wording of their circulars has been carefully and cunningly devised. For instance, they say that "nothing now remains for users of infringing roller-mills to do but to settle with us for their past use and obtain our license for future use, provided they desire to continue to use them," thus leaving with the miller a strong impression that his roll does infringe; but in case they were brought to account for such a claim, they would quietly crawl out through a neatly devised hole that they have prepared for themselves, by simply saying: "We did not say that your roller-mill infringed." Occasionally, however, doubtless due to their crafty desire for monopoly, they break through their gauzy pretenses and make broad assertions, such as are contained in their circulars and letters referred to, which we presume is due to the fact that "the shoe pinches," and "the loudest wail comes from the greatest sufferer."

The construction of the "Keystone Roller Mill" is different from that of any other. It does not come within the limitation of any roller-mill patent taken out prior to the Allfree patents; and even if the Gray patents were to be treated as valid, it would take a wild flight of imagination and a gross disregard of the limitations of that patent to make it bear even a semblance to the "Keystone Roller Mill," much less reach it. Therefore, the validity or invalidity of the Gray patent is a matter of utter indifference to us. The purposes of these attacks, publicly and privately made against the "Keystone Roller Mill," are apparent. We think the Consolidated Company will not find the upright and intelligent millers of the nineteenth century so utterly devoid of good sense and keen business perception as to permit themselves to be deceived by any such tactics as we have exposed, but on the contrary, they will scornfully reject their unjust demands and visit upon the offenders the retributive justice their dishonest methods deserve. Where such unscrupulous falsehoods will ultimately end we leave for honest men and Yours respectfully, time to decide.

THE J. B. ALLFREE Co.

P. S.—Just as we were in the act of mailing this letter to the press, our attention was called to the "Indianapolis News," bearing date November 9, 1889, publishing the following decision:

DENIES THE INJUNCTION.

JUDGE GRESHAM DECIDES IN FAVOR OF THE RICHMNOD CITY MILL WORKS.

Judge Gresham is winding up the legal business before him here to-day and this evening will leave for Milwaukee, where he will hold court next week. He rendered an opinion of some general interest this morning in the suit of the Consolidated Roller Mill Company, of Illinois, against the Richmond City Mill Works of this State. The complainants brought suit on four patents, upon which, it was alleged, the defendants were infringing. In his opinion Judge Gresham states that the Richmond Company operates one of the most

extensive establishments in the country, has large capital involved in the manufacture of roller-mills, and that to grant an injunction against it, as asked by the complainants, might prove ruinous to its business. He also says that the Richmond Company has evidently carried on its business in good faith, and that there is no evidence to show that it has knowingly infringed upon the patents of the Illinois corporation. The motion for a provisional injunction is therefore denied.

This needs no comment.

MILLING PATENTS.

Among the patents granted November 12, 1889, are the following:

George White, London, Ontario, Canada, No. 414,738, a threshing and separating machine.

Romanus Bohnenblust and Arnold Bohnenblust, Riley, Kans., No. 414,750, a rotary grain-meter.

Thomas J. Walden, Lebanon, Ind., No. 414,829, an elevatorbucket.

Chas. Rakes and Joseph H. Eilers, Lockport, N. Y., No. 414,887, a device for clearing the gratings of mill-races.

Conrad P. Steinmetz, Mitchell, Dak., No. 414,925, a mealbolt.

Jas. B. Martin, Grand Rapids, Mich., No. 415,050, a break-scalper.

Says the New York "Exchange Reporter:" Sometimes when bran is stored during the summer for winter use it will become infested with small white creatures about the size of a pin head. They are almost imperceptible to the naked eye, and although frequently there are myriads of them in the bran, they can only be discovered on very close examination of the bran. These little insects are a species of the flour mite, and although no harm will result from feeding bran infested with them to stock, still it is best that they be exterminated. This may be done by placing the bran in a tight bin, one that can be tightly covered, and inclosing with it an open vessel containing bisulphide of carbon of sufficient quantity completely to fill the bin with a dense odor. The vapor will descend and diffuse itself through the bran, and if enough is placed in the vessel all the animal life present will be destroyed. Bran that has been treated in this way must be exposed to the air until the odorous gas has entirely disappeared before used for feeding.

It is estimated that the production of wheat on the Pacific coast, along the lines of the Northern Pacific Railway, and the Navigation Company's line, was about 7,000,000 bushels above requirements of the settlements, for bread and seed. Of that amount it is thought that about 5,600,000 bushels have been sold to dealers, of which amount, between 3,000,000 and 4,000,000 bushels is in store on the lines of those roads.

SPECIAL NOTICES:

BOLTING CLOTH.

Do not order your cloth until you have conferred with us. It will pay you, both in point of quality and price. We are prepared with special facilities for this work. Write us before you order.

CASE MANUFACTURING CO... Columbus, Ohio.

Office and Factory, 5th Street, north of Naughten.

TOLEDO MILL PICKS AND STONE TOOL MFG. CO.

Manufacturer

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MILL PICKS.

Made of the best double-refined English cast steel. All work guaranteed. For terms and warranty, address, GEO. W. HEARTLEY, No. 297 St. Clair Street, Toledo, Ohio. Send for Circular.

Toledo, Ohio. Send for Circular.

N. B.—All Mill Picks ground and ready for use (both old and new) before leaving the shop. No time and money lost grinding rough and newly dressed Picks. All come to hand ready for use.

ALSO MANUFACTURERS OF

Shafting, Pulleys, Hangers, Coupling, Machine and Jobbing, Etc., Etc.



Valuable Liquid Glue.—Liquid glue possessing great resisting power, and particularly recommended for wood and iron, is prepared, according to Hesz, as follows: Clear gelatine 100 parts; cabinet-makers' glue 100 parts; alcohol 25 parts; alum 2 parts; the whole mixed with 200 parts of 20 per cent. acetic acid and heated on a water-bath for 6 hours. An ordinary liquid glue, also well adapted for wood and iron, is made by boiling together for several hours 100 parts glue, 260 parts water and 16 parts of nitric acid.

GENERAL NOTES.

According to a report made by the United States Consul at Marseilles, France, on February 27, 1889, the production of wine in the principal wine-growing countries of the world, vintage of 1888, given in gallons, is as follows: Australia 1,902,024; Austria 92,459,500; Algeria 72,072,788; Cape Colony 4,490,890; France 795,204,534; Greece 46,493,920; Hungary 184,919,000; Italy 798,242,489; Portugal 132,085,000; Roumania 18,418,900; Russia 92,459,500; Servia 52,834; Spain 607,591,000; Switzerland 29,058,700; Turkey and Cyprus 68,684,200: United States, 32,000,000.

COTOMPORARY COMMONT.

Such of our readers as have been of the opinion that the Millers' National Association was of little consequence will please note the fact that recently, when suit was commenced against the well known Minneapolis Milling firm of C. A. Pillsbury & Co. for an infringement of a patent on cockle machines, said Company simply turned over the documents to the Secretary, with request to take such steps for their protection as were necessary. The Association counsel takes all such matters in hand and defends or compromises such claims, as deemed best for the interests of members.—Milwaukee "United States Miller." All true and all very good, but who is going to foot the "counsel" fees? Is it the Association? If so, where will the money come from? At the annual meeting last June the amount on hand, according to the treasurer's report, was \$2,574. Half of this amount is exhausted in expenses and salaries. Lawyers must come cheap or the hat must be passed around. In other words, an assessment must be levied, and it is here the fun will come in. The few members will be obliged to go deep or the pot will not be large. - St. Louis "Merchant, Miller & Manufacturer."

According to the editor man of the "Milling Engineer," the members of the Millers' National Association have crawled in their holes and after pulling the holes in after them have said to the Big Four Consolidated Roller Mill Company: "Lay on McDuff!" Why, my deary, deary effusionist! If all the benighted(?) little millers, who do not belong to the Millers' National Association, would combine and each contribute one-half of what it has cost each individual member of the Millers' National Association to "keep his dues paid up," the "combine" would have a sufficient fund to mop the earth and a few back streets of Milwaukee with the frayed fragments of both the Millers' National Association and the Consolidated Roller Mill Co. Big Four. And when the time shall come, when the millers as a class need to act as a unit in self-defense, such a combine will be formed, quicker than the Millers' National Association and the Consolidated Roller Mill Co. Big Four can originate one of their windy prounciamentos.—St. Louis "Miller."

The wailing of millers over small profits has been a familiar sound for several years, but there has been less of it the past year, and we think the experience through which so many have passed will have proved vastly beneficial to the majority. Millers are not only learning to economize in the matter of equipping their mills with modern machinery, but

are learning ways to make their business profitable that they would not have thought of considering a few years ago.—

Kansas City "Modern Miller."

THIS CAME OVER THE ATLANTIC!

"SAID I TO MYSELF."

London Millers' Gazette.

When I was a nascent roller-mill man,
Said I to myself, said I,
An Associate* member I'll be if I can,
Said I to myself, said I;
For membership there is an honor indeed,
To meetings I'll go with long papers to read,
And I'll do what I can when it comes to a feed,
Said I to myself, said I.

I'll never throw dust in a secretary's eyes,
Said I to myself, said I,
Nor hoodwink the expert who's not over-wise,
Said I to myself, said I.
If I'm working a mill with a bad turn-out,
Or its future is somewhat a matter of doubt,
I'll tell everybody they'd better keep out,
Said I to myself, said I.

If I'm appointed manager of a large roller plant,
Said I to myself, said I,
I'll not say the "thirds" are as good as "patent,"
Said I to myself, said I.
My worthy profession I'll never disgrace,
By claiming of cerealine only a trace,
When analysis shows that it isn't the case,
Said I to myself, said I.

If I work as a traveler for a limited firm,
Said I to myself, said I,
I'll never deceive, but be upright and firm,
Said I to myself, said I.
I won't say our flour is eagerly sought,
That more if made would at once be bought,
Nor put down my losses as "decimal nought,"
Said I to myself, said I.

If as a milling expert a fortune I seek,
Said I to myself, said I,
I'll try to avoid being bashful and meek,
Said I to myself, said I.
For many experts often fail of success,
Because they lack courage their views to confess,
And fear to offend if their thoughts they express,
Said I to myself, said I.

If some well-endowed college of science and art,
Said I to myself, said I,
As a professor of milling should give me a start,
Said I to myself, said I;
I'll try to know something of what I'm to do,
I'll read upon subjects relating thereto,
And besides teaching milling, I'll study it too,
Said I to myself, said I.

In other professions in which men succeed,
Said I to myself, said I.
Of "cheek" and assurance they often have need,
Said I to myself, said I.
Professional modesty's pushed to excess;
The value of confidence all must confess;
And we roller-millers need a little, I guess,
Said I to myself, said I.

South Retford, Notts, England.
*National Association of Millers, &c.

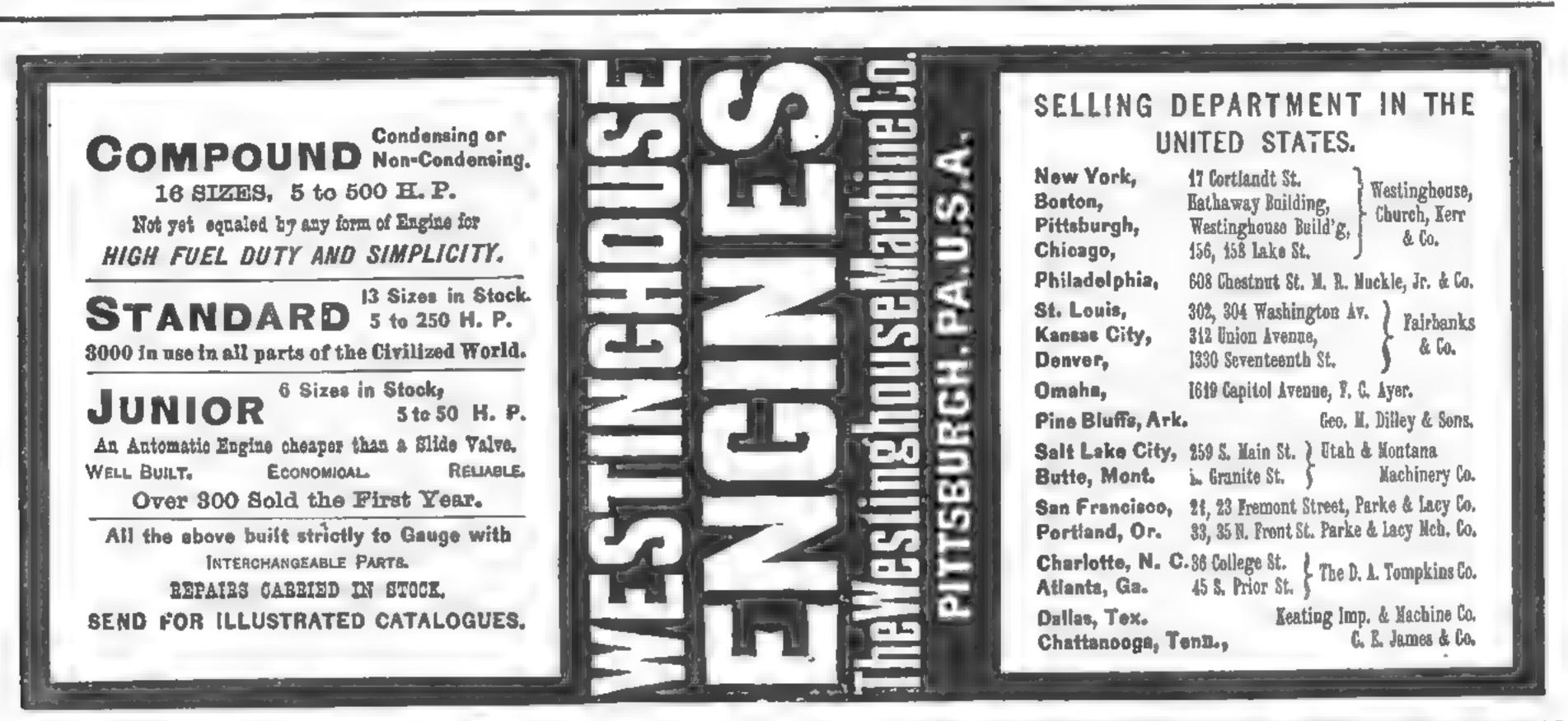
J. MORGAN.

TO UTILIZE A CANADIAN WATER POWER.

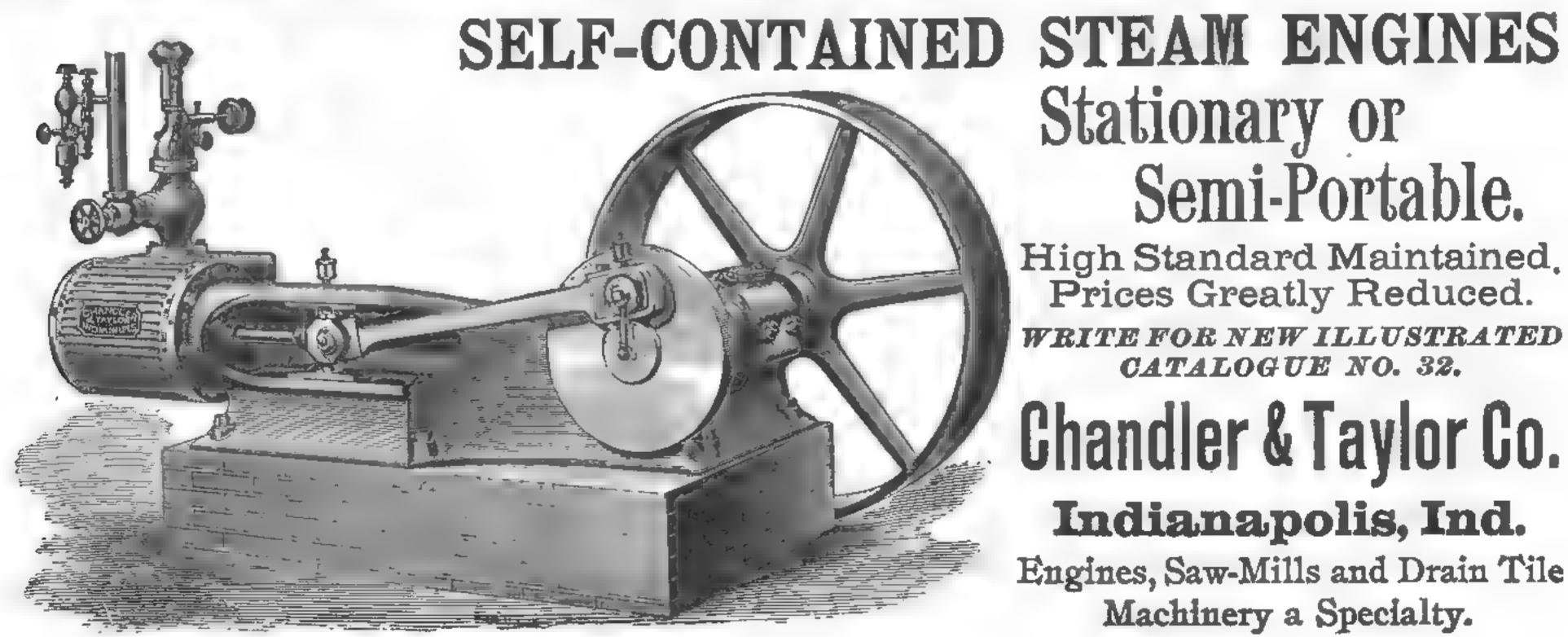
Following is a statement of an important business move sent out from St. Paul, Minn., on November 8: A business transaction has just been consummated which involves a scheme to utilize the water power of the great Kakabikka Falls, a few miles from Port Arthur, Ont. Deeds have been recorded by which Thomas Marks, of Port Arthur, conveys to Dr. A. M. Eastman, of St. Paul, and R. J. Anderson, of Minneapolis, representatives of a wealthy St. Paul, Minneapolis and Philadelphia syndicate, the property known as Kakabikka Falls, containing 480 acres and the water rights to the Kaministiquia river at that point. The river there is 350 feet wide, with a perpendicular fall of 100 feet, and can be developed to furnish 200,000 horse-power. The new proprietors propose to build at that point a Canadian Minneap-

With this end in view a large tract of adjoining olis. property has been secured, which will give ample space for a city. A large amount of capital is behind the scheme, and it is proposed to build there flouring-mills equal to those of Minneapolis for grinding Manitoba wheat, pulp and paper mills for utilizing the poplar forest adjoining, reduction works for turning the silver ores of the neighboring mines into bullion, blast furnaces, saw-mills and factories of all descriptions for the output of which a market can be found. Eventually it is intended to use a portion of the power for generating electricity, to be used not only for local purposes, but also to operate the silver mines. The Port Arthur, Duluth and Western Railway is extending its lines two miles to the falls. A branch of three miles will connect the Canadian Pacific with the new city. Engineers are now on the ground to make a complete topographical survey, in order that the plans may be made as complete as possible.

Says the Minneapolis "Market Record:" This wheat crop is the finest in general quality that has been raised in the Northwest in many years. It was not only fine when cut, but the weather since has not been of a character to damage it. It has been generally threshed and taken care of without injury from dampness and resultant mold and sprout, so common with crops in good condition when cut. In late years, until this, wheat from the north alone could be depended on for high-grade flour, while this year wheat from the south is about the same as wheat from the north.







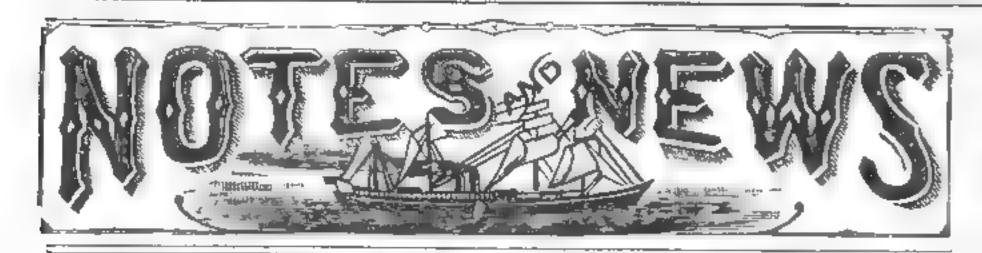
Stationary or Semi-Portable.

High Standard Maintained. Prices Greatly Reduced. WRITE FOR NEW ILLUSTRATED CATALOGUE NO. 32.

Chandler & Taylor Co.

Indianapolis, Ind.

Engines, Saw-Mills and Drain Tile Machinery a Specialty.



J. B. Moore, Burgaw, N. C., builds a grist-mill. Gabriel Smith, miller, Brookville, Pa., assigned. Beach & Flint, Carlisle, Ark., build a grist-mill. E. T. Turlyton, Clinton, N. C., builds a roller mill. The Farmville, Va., Flour Mills are being improved. Shaw & Ehlers, millers, Litchfield, Minn., dissolved. J. M. Graham, Centerville, Tenn., builds a roller mill. A. O. Young & Co., Mt. Airy, Md., build a flour-mill. Debusk Bros., Estillville, Va., improved their flour-mill. T. J. Parsons' grist-mill, St. Clements Bay, Md., burned. H. W. Williams, Gibraltar, N. C., improves his flour-mill. John P. Fort's grist-mill, Macon, Ga., burned; loss \$2,000. J. Carmack, Park Mills, Md., bought the Park Flour Mills. The B. W. Peckham grist-mill, Hearne, Tex., burned; loss \$5,000. Armstrong, Squires & Co., North East, Md., remodeled their mill. Godwin & Arnold, Godwin, Tenn., are building a 50-barrel roller flouring-mill,

Smith & Mason, flouring-mill, Sonora, Cal., dissolved, Smith & Chamberlain succeeding.

The National Pulley Covering Co., of Baltimore Md., have recently received an order for their covering for a pully 16 feet in diameter running a 26-inch belt. Their October business came from 23 states, a large amount of this business coming from concerns who first made trial of their goods, being skeptical as to the remarkable results obtained from the use of this "covering." Their continued orders show their faith in it.

A Minneapolis report of November 13 says: "Minneapolis will lose the vast business interests of the Washburn-Crosby Milling Co. The company's lease expires next September, and there is an option on the property given to an English syndicate which will probably be closed. The company's officials have gone to Duluth to look for another location. The company is doing a business of \$10,000,000 a year. It has received urgent solicitation from Buffalo parties to locate there. The company's plans will call for a mill with a 6,000-barrel capacity and a large storage warehouse." Concerning the probability of this firm's coming to Buffalo, Mr. John H. Smith, of R. G. Dun & Co.'s Commercial Agency, said to a reporter that he does not think it is Buffalo at all, but Niagara Falls, that will have the big milling company, for, said he, "Buffalo has no great milling power to offer, the project for utilizing the Niagara river, which called the attention of millers outside to the desirability of location here, having failed. I understand, from authority that I consider perfectly reliable, that the Niagara Falls people have raised the money for their water tunnel, and for that reason the big milling company is more likely to go there than here, for they will have the power as an inducement,"

The Case Mfg. Co., Columbus, O., has almost completed and about Nov. 10 will move into its elegant new shops and will be in better shape than before scourged by fire. Its new location is on the Pan Handle and Baltimore & Ohio railroads, about one mile due east of the union depot, where they secured five acres of ground, upon which they have ample side tracks covering both sides of the immense plant. The shops are of brick, one story high, covered with slate and glass, and are magnificently lighted. The wood shop is 60x200. The machine shop is of the same dimensions, and a third building, 60x150, lying parallel with the others, is divided so 50x100 is devoted to wood sawing and heavy wood planing and other wood dressing, and the remainder, 50x50, will be the paint shop. Besides these are sheds to contain a million feet of lumber, dried and curing. The engine and boiler house, 50x50, is detached, the two being separated by a brick wall running through to the roof. The whole shop will be heated and ventilated, and dust-collectors will collect and carry off the dust and the shavings. The machinery will all be new and of the very finest. It is the purpose of the company early in 1890 to erect a

warehouse, 60x200, and a complete foundry on a large scale and modern pattern, and when this is done the plant will be among the largest exclusively mill-machinery and mill-building plants in the United States, and will leave this prosperous company in a position second to none in facilities for the economical production of goods in competition with the whole world.

COMMENDATORY COMMUNICATIONS.

Particular attention is invited to the self-explaining communications presented herewith:

MANLIUS STATION, N. Y., October 28, 1889. The Case Mfg. Co, Columbus, Ohio:

GENTLEMEN: After running my mill over two months, I feel it my duty and justice to you to state that I am more than pleased with the mill you built for me. It started like a clock from the word "go," My flour is discounting the fanciest brands of flour in the market. My clean-up is equal to any mill in the state. I will say that the Case rolls and flour-dressers can not be beaten in the world for light running and ease of access to all their parts. I would advise any miller building a new mill or remodeling an old one to place their contract with the Case Company. Thanking you for the prompt and efficient manner in which you furnished my machinery in so short a time, after so great a loss and damage by fire burning your works, and with the best of wishes, I remain,

Yours respectfully,

PETER SNYDER.

CLEVELAND, TENN., Aug. 29, 1889. THE CASE Mrg. Co., Columbus, Ohio:

GENTLEMEN: If we were to build a hundred mills, we would not permit any other than the "Case Rolls" to enter them. They are the best rolls on earth.

Yours truly, W. C. MANSFIELD & Co.

SAVANNAH, WAYNE COUNTY, N. Y., Sept. 23, 1889.

THE CASE MFG. Co., Columbus, Ohio:

Gentlemen: In reply to yours, asking how we like our new mill, will say it is a model mill in every particular, and we have nothing but praise for our flour. We have been running nearly two months and are more than pleased with it. Your rolls run with less power and attention, and stay in tram, have the finest adjustments and are easier of access to all their parts than any roller-mill we ever saw. Your purifiers are perfection, and these, with your system of separations, give us a mill second to none. Visitors say we have the "slickest" mill in the State. Insurance men say that it is one of the best fire risks they ever inspected. If we were to put in another mill, we would want the Case Machines and System, and we invite all millers who come our way to visit our mill. It will speak for itself. Wishing you the success you truly merit, we are, sirs,

Very respectfully yours,

HILL & BRADLEY.

LITCHFIELD, ILL., Sept. 14, 1889.

THE CASE MFG. Co., Columbus, Ohio:

GENTLEMEN: We are in receipt of your favor of the 11th inst., and in reply would say we have twenty Case Automatic Feeds on our Dawson and Allis rolls and are greatly pleased with them. We have tested the feeds thoroughly on different material and find they work as well on bran and germ and other soft material as they do on middlings. We have derived great benefit from the use of them and can cheerfully recommend them to the milling fraternity. Yours truly, J. C. EDWARDS.

General Manager Litchfield Milling Company.

BLUFFTON, Ind., August 2, 1889.

THE CASE MFG. Co., Columbus, Ohio:

GENTLEMEN: Your mill-wright has just completed our mill, and we want to say that you have filled the contract to the letter. Every thing is working all O. K., and we are well pleased with our mill in every respect. Your automatic scale is a success, and no miller can afford to be without it. We feel under obligations to you for the way you have treated us and wish you every success.

Yours respectfully,

M. D. Brown & Son.







THE BEST ARE THE CHEAPEST.

MILLERS' FLOUR SACKS A SPECIALTY.

THE PATRONAGE of the MILLING TRADE is MOST RESPECTFULLY SOLICITED.



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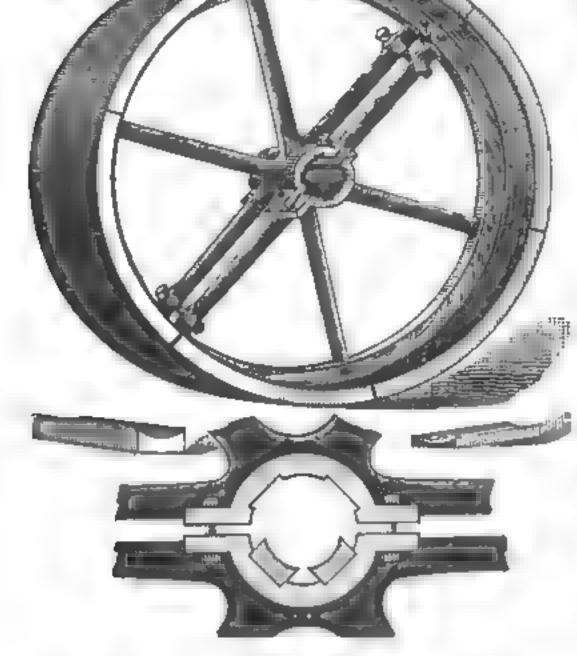
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Wood Split Pulleys

WOOD RIM WITH IRON ARMS. The Best Pulley on Earth I

Is very easily and quickly adjusted to Shaft. Has Patent Iron Bushings Interchangeable, to Fit Different Diameters of Shafts. Has FOUR or SIX Bearings on Shaft. This fastening never slips. Every Pulley strongly

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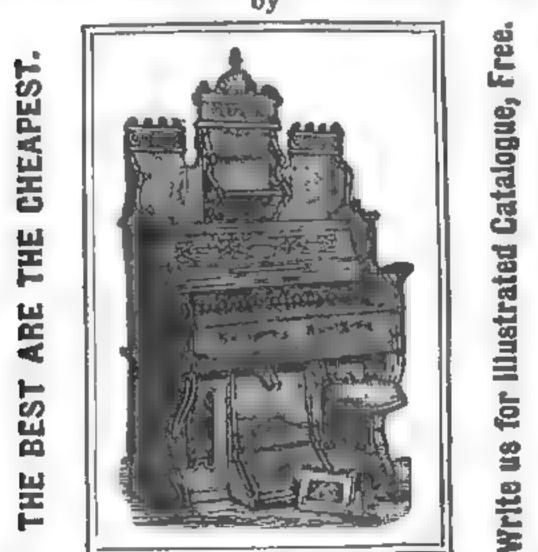


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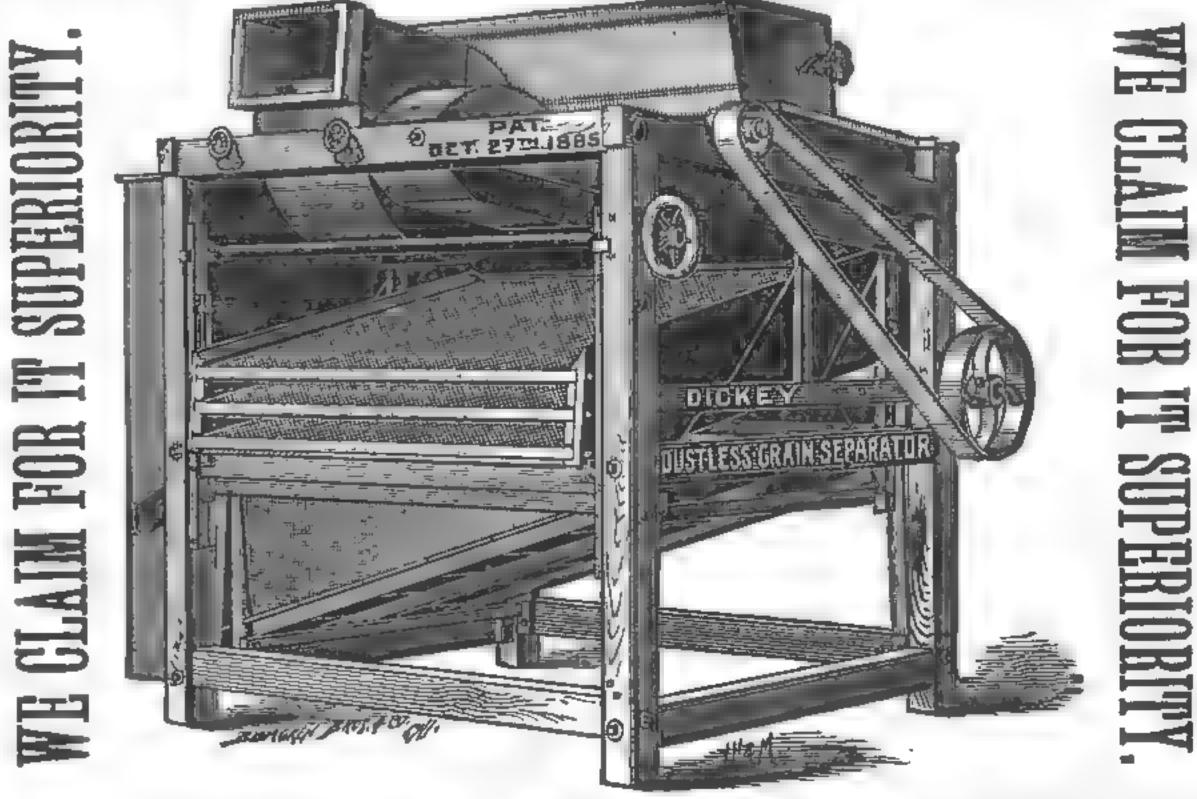
MENTION THIS PAPER.



The Cincinnati Corrugating Co.

DICKEY DUSTLESS

This Separator is our latest and most perfect, and guaranteed to be the superior of any now on the market. This machine, as can be seen by the cut, is not a warehouse fanning mill with one patent attachment, but is a Dustless Separator, made for the express purpose of thoroughly cleaning and separating all kinds of grain in large quantities; its construction is such that the working machinery and weight is all within the parts or anchors.



We claim for it Superfority over everything of the kind made, in simpleness, durability, saving of power, capacity and cost of construction. Its height will accommodate any number of spouts from different points, without moving machine. They have a capacity from 700 to 1,500 bushels per hour. We also control exclusively the manufacture of the celebrated Dickey Glant, End and Side Shake, Warehouse Mills, that have attained such a world-wide reputation. Sent on approval to any reliable party. For full particulars address,

Successors to

EUROPEAN ECHOES.

A WRITER on Indian wheat raising says: "In India I found the people using much the same primitive tools and methods they had centuries. The ground is plowed thirty times, and I believe it is this which gives it its wonderful vitality. The same land which was raising wheat 1,000 years ago still raises it, and it has never been strengthened by fertilizers. The average crop is only seventeen bushels to the acre, but any amount of labor can be had at \$1.20 a month for each man."

London quotations on wheat grain on October 29 included the following: English new white Kent 31s. to 36s. 6d.; new red ditto 30s. to 34s.; old white English 34s. to 38s.; old red English 30s. to 34s.; Duluth 35s. to 36s.; red winter American 28s. to 35s.; Californian and Oregon 36s. to 37s.; red ditto 33s. to 35s.; Canadian 35s. to 36s.; Chilian 35s. to 36s.; Australian 38s. to 41s.; New Zealand 34s. to 38s.; Bombay red 29s. to 31s.; Bombay white 32s. to 35s.; Hungarian 35s. to 38s.; Petersburg 31s. to 35s.; Saxonska 34s. to 36s. These prices are for 496 pounds. There was no American No. 1, No. 2, No. 3, club white or Michigan white on offer on the date mentioned.

Says the London, England, "Miller" of October 28: Of late the sunshine of the week has been at a minimum, and dank fogs or fine rain have prevailed enough to reduce the condition of English wheat samples. Brighter and colder weather on Thursday and Friday was very favorable for tillage work in the fields or for threshing out grain, especially barley. Farmers' deliveries keep on a full scale, compared with other years, but the conviction is general that the 187 markets whence returns are made represent more than the one-third of the bulk sold. Obscure and remote markets are scarcely likely to double the quantity changing hands at the chief markets. It can not be denied that London receipts of farmers' wheat are more than usual, that is, statistically the figures are higher. Larger than usual, or not so, the supply of English wheat is enough to clog the market and keep prices at a level below the views of most foreign sellers, who yet unwillingly are obliged to submit to terms fixed by present home supplies. Pulled back as prices are by circumstances and the favorable seed season at home and abroad, they recede scarcely to any quotable extent. The coast has but a scanty offer of cargoes, nor are the direct port steamers at all embarrassing by the numbers. Doubtless Russia is crowding forward wheat supplies, while navigation keeps free. * * * * Large wheat shipments from Russia are expected at this period. Those of the week compare:

1889. 1888. 1887. 327,911 453,941 Value has been 3d. to 6d. cheaper in some cases. India is exporting very small quantities of wheat at present. * * * Australia is looking for a good export surplus of wheat from the growing crops and shippers offer Dec.-Jan. at 36s. 9d. per 480 pounds,—so that English white wheat seems good and cheap at 36s. per 504 pounds. * * * * France, by its non-requirements of wheat from abroad, leaves the United Kingdom the only important buyer, especially of American wheat. Of Russian wheat there seems to be many small buyers, which together are more important than the English demand. Paris wheat is quoted 38s. 10d. up to 39s. 4d. from October up to February, and compares with London wheat, a la Produce Company:

Nov. Dec.-Jan. Feb.-Mar. April-May. June-Sept. 34s. 9d. 35s. 6d.

There are buyers, it is stated, at 6d. to 1s. below the above asking prices. The French markets have been weak in price under the decreased value of 12 marks flour.

London quotations for flour on October 28 were as follows per sack of 280 pounds: London top price brands 36s.; London town whites 27s. 6d. to 28s.; London town household 25s. 6d. to 26s. 6d.; London No. 2 at 23s. to 24s.; American spring patent 32s. 6d. to 35s.; ditto 1st bakers' 24s. 6d. to 26s.; ditto 2d bakers' 22s. to 24s.; ditto low grade 13s. to 17s.;

straight winter 24s. to 26s. 6d.; patent winter 29s. to 34s; Californian 28s. to 32s.; French 32s. to 34s.; Hungarian 34s. to 40s. for the finest grades, which were scarce.

THE Liverpool "Corn Trade News" presents the following estimates of the cost of growing wheat in "New Russia," a part of the Russian Empire which promises the greatest things for the future. The figures are compiled from official sources. In calculating the cost of cultivation, nothing appears to have been allowed for management expenses, interest on capital, or rates and taxes, nor is anything said as to what becomes of the straw. The market price throughout is reckoned at 70 copecks per pood, or 20s. per quarter at the farm. Firstly we have the average yield per acre in bushels for the winter crop, and spring crop separately and together:

Districts.	Winter, bus. p. acre.	Spring, bus. p. acre.	Together, bus. p. acre.
Alexandria		71/4	9 1-6
Elizabethgrad	81/4	614	71/4
Tiraspol	71/6	61/4	67/8
Odessa	71/6	5 1-5	6.1-7

At the prices of 70 copecks per pood the value of each acre in the different districts is as follows:

Alexandria, W	heat yiel	d per acre in	money,	27s.	3d,
Elizabethgrad	6.6	6-6	44	20s.	6d.
Tiraspol	4.6	64	44	18s.	7d.
Odessa.	4.6	44	+6	17s.	Sđ.

The cost of production per acre is reckoned as follows:

For	Ploughing	28.	7d.	per acre.
4.6	Harrowing	1s.		6.6
44	Seed 67 lbs. at 70 copecks	25.	9d.	44
1.6	Harvesting	48.	3d.	6.6
66	Stacking		7d.	6.4
2.2	Threshing	1s.	2d,	6.6
44	Rent	3s.	9d.	66
Cost	of production	16s.	1d.	66

Placing the estimate side by side shows the following results:

	Produce per acre in money.	Cost of production.	Profit per acre.
Alexandria	27s. 8d.	16s. 1d.	11s. 2d.
Elizabethgrad	20s. 6d.	16s, 1d.	4s. 5d.
Tiraspol	18s. 7d.	16s. 1d.	2s. 6d.
Odessa	179	16e 14	114

So far we have only treated of the winter crop. The following table shows the results upon the same data when an average of the yield of the winter and spring crop is taken:

	Average yield.	value.	Cost of production.		it or ss.
Alexandria	9 1-6	22s. 9d.	16s. 1d.	Cs. 8d.	profit
Elizabethgrad	7'4	18s.	16s. 1d.	1s. 11d.	33
Tiraspol	67	17s.	16s. 1d.	11d.	44
Odessa	6 1-7	16s.	16s. 1d,	11d.	loss

STATISTICS OF SIX EXPOSITIONS.

The London exhibition of 1851 covered 21 acres, attracted 17,000 exhibitors, cost \$1,463,970, was open for 144 days, received \$2,530,500, and admitted 6,039,195 visitors.

The Paris exposition of 1855 covered 241 acres, attracted 21,779 exhibitors, cost \$5,000,000, was open for 200 days, received \$640,495, and admitted 5,162,330 visitors.

The London exposition of 1862 covered 23\fractes, attracted 28,653 exhibitors, cost \$2,300,000, was open for 171 days, received \$2,042,650, and admitted 6,211,103 visitors.

The Paris exposition of 1867 covered 37 acres, attracted 50,226 exhibitors, cost \$4,000,000, was open for 217 days, received \$2,103,675, and admitted 10,000,000 visitors.

The Vienna exposition of 1873 covered 40 acres, attracted 42,584 exhibitors, cost \$11,000,000, was open for 186 days, received \$1,032,350, and attracted 7,254,687 visitors.

The Centennial at Philadelphia covered 60 acres, attracted 60,000 exhibitors, cost \$8,000,000, was open for 159 days, received \$3,813,720, and admitted 9,910,966 visitors.

The Travelers' Ready-Reference Guide (The Red Guide) is out for November, with the latest Fall time-tables. This guide is issued from the office of the Official Guide, of which it is practically a pocket edition for the Eastern, Central and Southern States, and the information published is therefore reliable. In the last number the Index of Stations has been moved to the front of the book, for greater convenience of reference. Address the Knickerbocker Guide Co., 46 Bond street, New York, N. Y. Price 25 cents a number.

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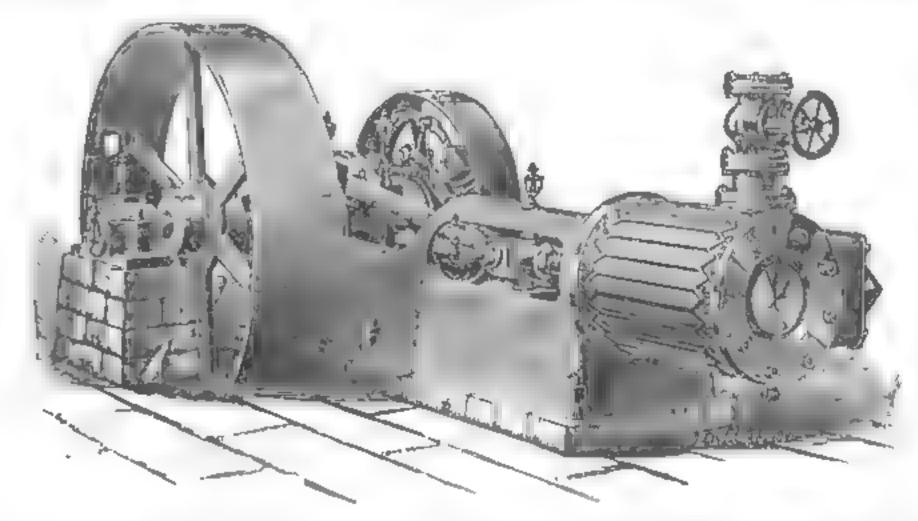
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This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is

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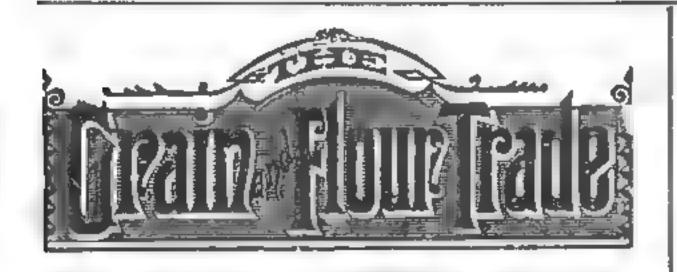
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YUUR BELTS FROM SLIPPI

And Save Your Power by Using FRICTION COVERING for Pulleys. Agents Wanted. Satisfaction Guaranteed- Easily Applied. No Rivets. Effective.

NATIONAL PULLEY COVERING CO., BALTIMORE, MD.



OFFICE OF THE MILLING WORLD, BUFFALO, N. Y., Nov. 16, 1889.

Friday of last week was a day of generally dull and firmer markets. November wheat closed at 83½c. in New York, with Atlantic port receipts 107,856, exports 162,571, and options 1,200,000 bushels. November corn closed at 41¾c., with receipts 195,000, exports 238,000, and options 200,000 bushels. November cats closed at 26¾c., with receipts 112,000 and options 60,-000 bushels. Wheat flour was irregular, with spring patents scarce and firm, and other lines in fair demand and steady. The Atlantic port receipts included 84,565 packages, and the exports were 30,241 sacks and 50,404 barrels. The other lines were featureless.

Saturday brought dull, unchanged and featureless markets all around. November wheat closed at 83½c., with Atlantic port receipts 61,-220, exports 104,740, and options 840,000 bushels. The total interior wheat receipts for the week were 4,547,000 bushels. November corn closed at 41½c., with receipts 176,000, exports 35,700, and options 120,000 bushels. November oats closed at 27c., with receipts 105,132, and options 152,000 bushels. Wheat flour was quiet and unchanged. The minor lines showed no quotable changes.

Monday brought dull and featureless markets, with general steadiness. November wheat closed in New York at 83 1/8c., with Atlantic port receipts 245,670, exports 3,814, and options 850,000 bushels. November corn closed at 41%c., with receipts 144,537, exports 11,484, and options 840,000 bushels. The government report on corn placed the crop of 1889 at 2,040,-000,000 bushels, an increase of 15,000,000 over the report of last month. November oats closed at 27c., with receipts 137,367 and options 150,000 bushels. Wheat flour was unchanged and featureless. New York receipts were 61,-049 packages and exports 10,197 sacks and 28,-669 barrels. Spring and winter patents were rather scarce. The minor lines were featureless. The visible supply in the United States and Canada was as follows:

	1889.	1888.	1887.
	Nov. 9.	Nov. 10.	Nov. 12.
Wheat	26,842,259	34,340,610	37,338,887
Corn	6,966,403	0,250,753	6,933,369
Oats	6,685,241	8,456,396	6,550,006
Rye	1,307,149	1,556,093	275,816
Barley	2,482,598	1,624,662	3,215,569

Tuesday brought dull, steady and featureless markets. There were lighter receipts in the Northwest, an increase of 1,572,000 bushels in the English visible supply, large Russian imports into Great Britain, and official cable reports placing the Russian wheat crop 91,000,000 bushels below that of 1888 and the Russian rye crop 95,000,000 bushels below that of 1888. November wheat closed in New York at 831/4c., with Atlantic port receipts 110,194, exports 55,-700 and options 1,520,000 bushels. November corn closed at 41%c., with receipts 210,500, exports 329,700 and options 760,000 bushels. November oats closed at 27 1/4c., with receipts 69,-000 and options 150,000 bushels. Wheat flour was dull and irregular and in buyers' favor. The minor lines showed no changes.

The following shows the amount of wheat and flour, together with the amount of corn on passage to United Kingdom, for ports of call or direct ports for the weeks mentioned:

-	1889.	1888.
	Nov. 12.	Nov. 13.
Wheat and flour, qrs	1,806,000	2,527,000
Corn, qrs	428,000	100,000

The following shows the amount of wheat and corn on passage to the Continent for the past week, and for the same week last year:

		1889.	1888.
		Nov. 12.	Nov. 13.
Wheat, qrs		436,000	596,000
Corn, qrs		144,000	39,000
			Qrs.
Shipments India	wheat to	U. K	37,500
do	do	Continent.	45,000
The imports in	to the Ur	nited Kingdon	m for the

The imports into the United Kingdom for the past week and for the same weeks in previous years were as follows:

1 comp word and Koppo	11/0.		
	1889.	1888.	1887.
	Nov. 12.	Nov. 13.	Nov. 15.
Wheat, qrs	325,000	247,000	152,000
Corn, qrs	126,000	74,000	96,000
Flour, bbls	265,000	180,000	210,000
			_

Wednesday brought active and higher mar kets on good buying, led by Hutchinson in Chicago. In New York November wheat closed at 841/sc., with Atlantic port receipts 139,834, exports 101,262, and options 4,000,000 bushels. Northwestern receipts were heavy, Duluth receiving 482 carloads of wheat and Minneapolis 524. Interior receipts were generally heavy. November corn closed at 42 1/4c., with receipts 212,445, exports 54,132, and options 760,000 bushels. November oats closed at 27% c., with receipts 104,000, exports 12,844, and options 500,000 bushels. Buckwheat grain was 48c. Rye was quoted at 55c. for No. 2 Western. Barley was dull and weak at the following figures: Two-rowed offered at 55c.; six-rowed 59c. asked; Canada at 59@75c. for both extremes; Western 50@60c. Late, 1 load Canada reported on p. t. and 1 car two-rowed State, affoat, 53c. Malt was irregular and neglected at the following quotations: Fair to choice two-rowed 70@ 75c.; do six-rowed 70@80c.; country-made Canada 75@85c.; city do 80@90c. Mill-feed was quiet and steady at 60@65c, for 40, 60 and 80-lb., 65@70c. for rye, and 80@85c. for middlings. Wheat flour was stronger with wheat, and concessions were generally refused by holders. The quotations for the day were as follows:

SPRIN	G FLOUR.	
	Sacks.	Barrels.
No grade	\$1,45@1.60	8 @
Fine	1,80@2,05	1.95@2.20
Superfine	2.05@2.30	2.30@2.65
Extra No. 2	2.30@2.60	2.55@2.85
Extra No. 1	3.00@3.20	3.25@3.75
Clear	3.05@3.35	3,40@3,50
Straight	3.75@4,10	4.15@4.70
Patent	4.60@4.80	4 80@5,20
WINT	ER FLOUR.	
	Sacks.	Barrels.
Ma amada	01 00/21 OF	

AA TTA T TO	W LLOUK.	
	Sacks.	Barrels.
No grade	\$1.60@1.85	\$@
Fine	2.05@2.35	2.15@2.45
Superfine	2.40@2.60	2.40@2.65
Extra No. 2	2.45@2.75	2.55@2.85
Extra No. 1	2,85@3,85	3.00@3,75
Clear	3,40@3.75	3.70@4.00
Straight	4.00@4.05	4 05@4.35
Patent	4.25@4.45	4.45@4.85
CITY	MILLS.	
word & a		

2 000020	21.45 (03.21.20	21.10 (22.100
CITY	MILLS.	
W. I grades		4.20@4.25
Low grades		2.50@2,60
Patents		4.90@5,45
FERT A AT A S A	1 1 0 0	

The Atlantic port receipts of flour included 19,030 sacks and 47,474 barrels, and the exports 9,744 sacks and 49,034 barrels. Among the reports was one by Mr. Carll, who has made a visit to the Northwest. He said that the crop of spring wheat is about as the government report has made it. Minnesota has a good crop, Dakota a spotted one, with the east valley of the Red River fair; the west good for about 30 miles west, but west of that it is poor, as well

as Jim River valley, and millers think flour is dragging on the bottom for this crop.

Rye flour was higher at \$2.90@3.15. Buck-wheat flour was dull and neglected at \$1.65@1.90 for common to choice. Corn products were strong, but not active, at the following quotations: Coarse meal 82c; fine white and yellow 93c; Southern and Western in bbls \$2.50@2.60; Brandywine and Sagamore \$2.65.

Thursday was a day of firmer markets. November wheat closed in New York at 84½c., with receipts 219,350, exports 64,568, and options 9,600,000 bushels. November corn closed at 47½c., with receipts 83,200, spot sales 163,000, and options 1,030,000 bushels. November oats closed at 27½c., with receipts 67,300, spot sales 181,000, and options 720,000 bushels. Wheat flour was firm, with receipts 42,518, and sales 22,150 packages. The minor lines were featureless.

The Laredo, Tex., Cotton Gin & Milling Co., recently formed with \$25,000 capital stock, will build a grist-mill.

Authory Zeitinger, of Zeetonia, Mo., has bought and will remodel to rolls the Greenfield Mills, Md., flour-mills.

Mr. Lothar Becker, superintendent of the Star Flour Mills, Galveston, Tex, died November 6, at the age of 57 years.

Geo. E. Hoppie & Co. and others, Atlanta, Ga., have organized the Atlanta Elevator & Warehouse Co. and bought the Atlanta Elevator for \$40,000.

BUFFALU MARKETS.

WHEAT -Prices of hard spring wheat are still rising. No. 1 hard was firm at 90c in store; No. 1 Northern sold at 86%c, and No. 2 do at 83%c; No. 2 red winter is firm at 841/2@85c, and extra No. 8 is quoted at 80@81c. No. 2 white is 79@80c; No. 3 do 75c, and extrr No. 8 was held at 831/2c. Sales were free at these figures. CORN-The market is reported steady at about yesterday's prices. No. 2 mixed is worth 89c. and No. 2 yellow 89%c in store. On track prices are half a cent higher. OATS-Sales of No. 2 white were made today at 261/2@87c. and No. 2 mixed are held at 241/2c. BARLEY-Trade remains dull as maltsters do not buy. The range 55 to 67%c for Canada. No State is offered. Western is quoted at 40@55c. OATMEAL-Akron, \$6,00; Western \$5.75per bbl.; rolled oats, in cases, 72 lbs. \$3 25. CORNMEAL-Coarse, 80@85c.; fine, 85-@90c.; granulated, \$1.50 per cwt. MILLFEED-City-g ound coarse winter, \$11.00@11.50 per ton; fine do, \$11.00@11.50; finished winter middlings, \$18 00@ 14.50; coarse apring do, \$11.50@12.00.

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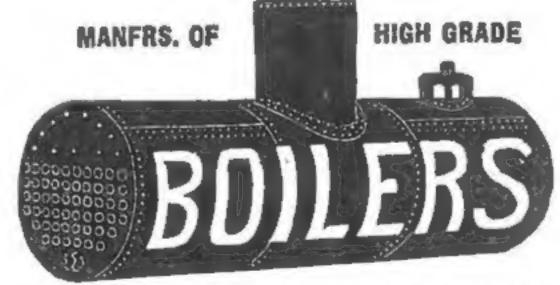
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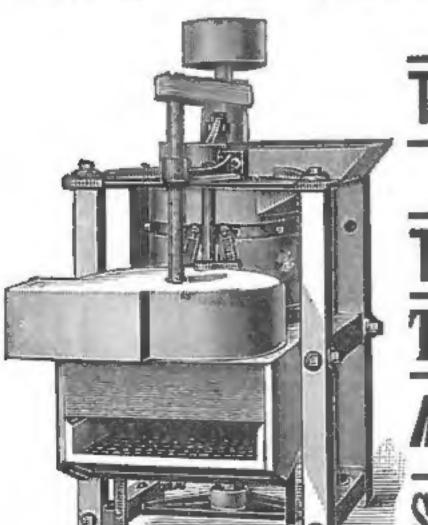


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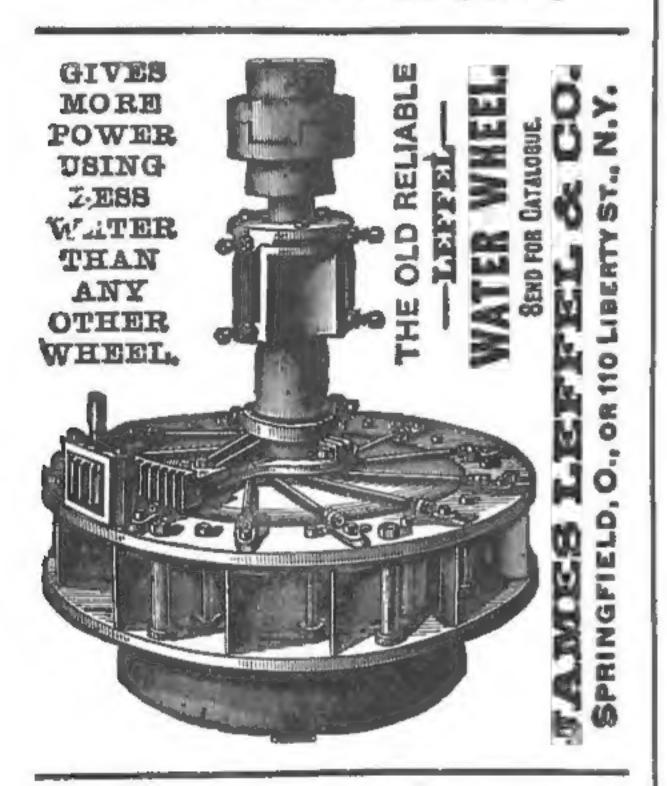
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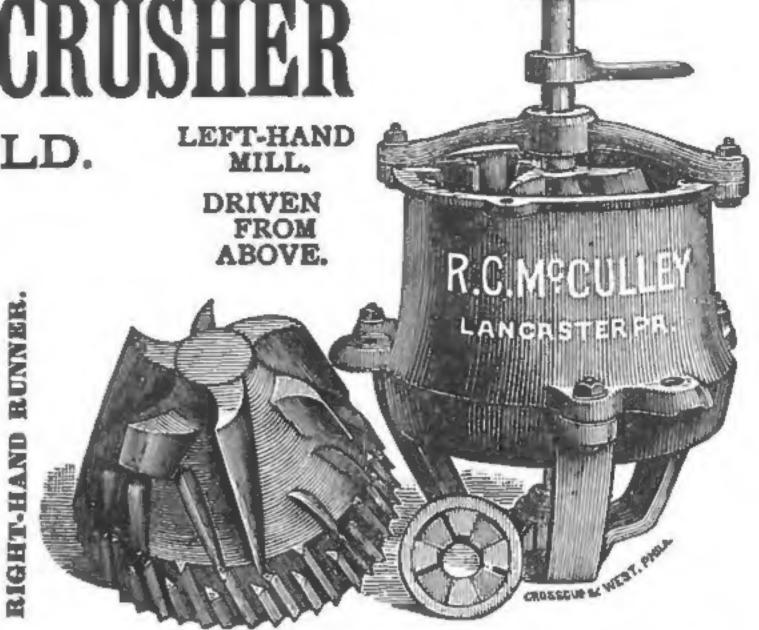
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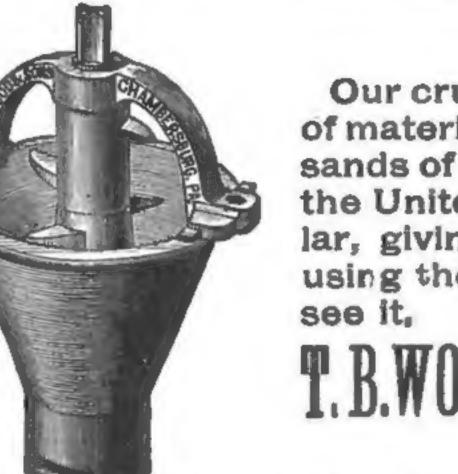


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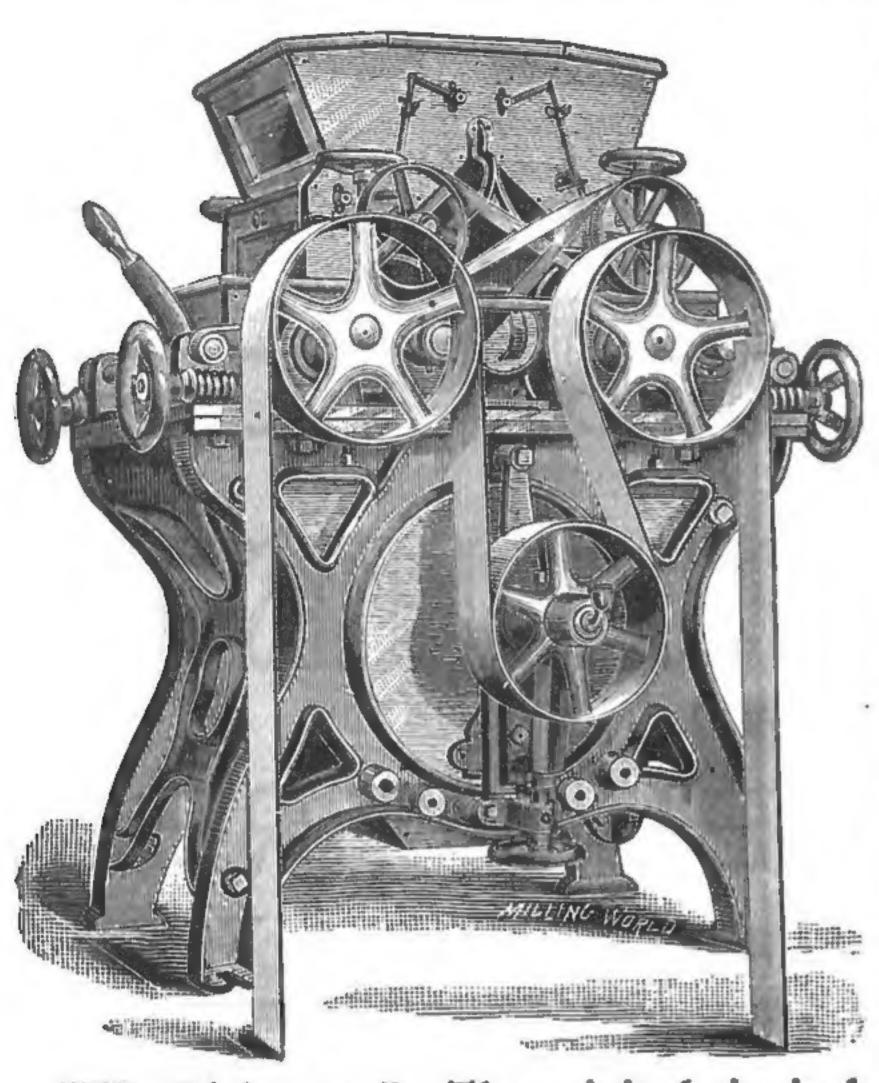
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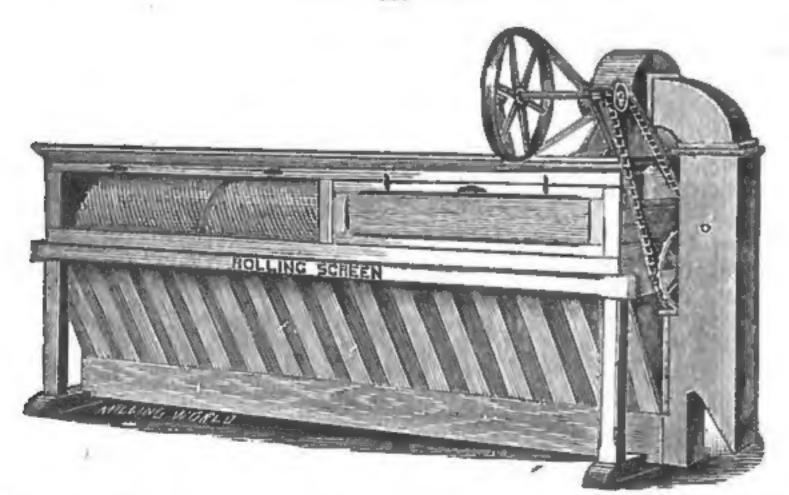
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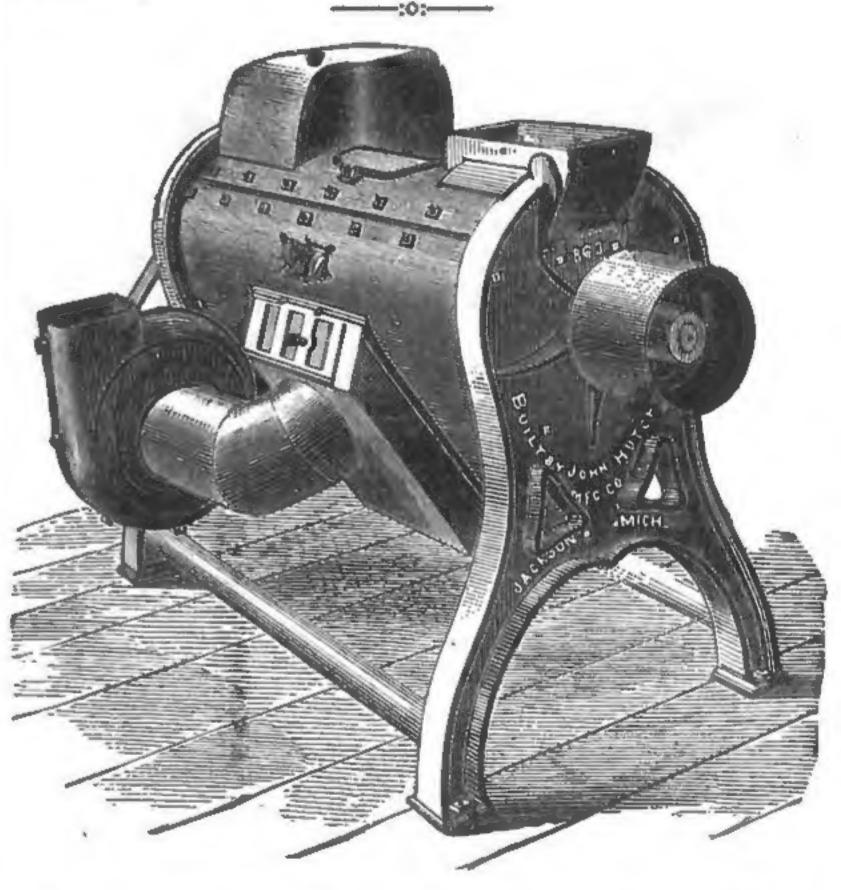
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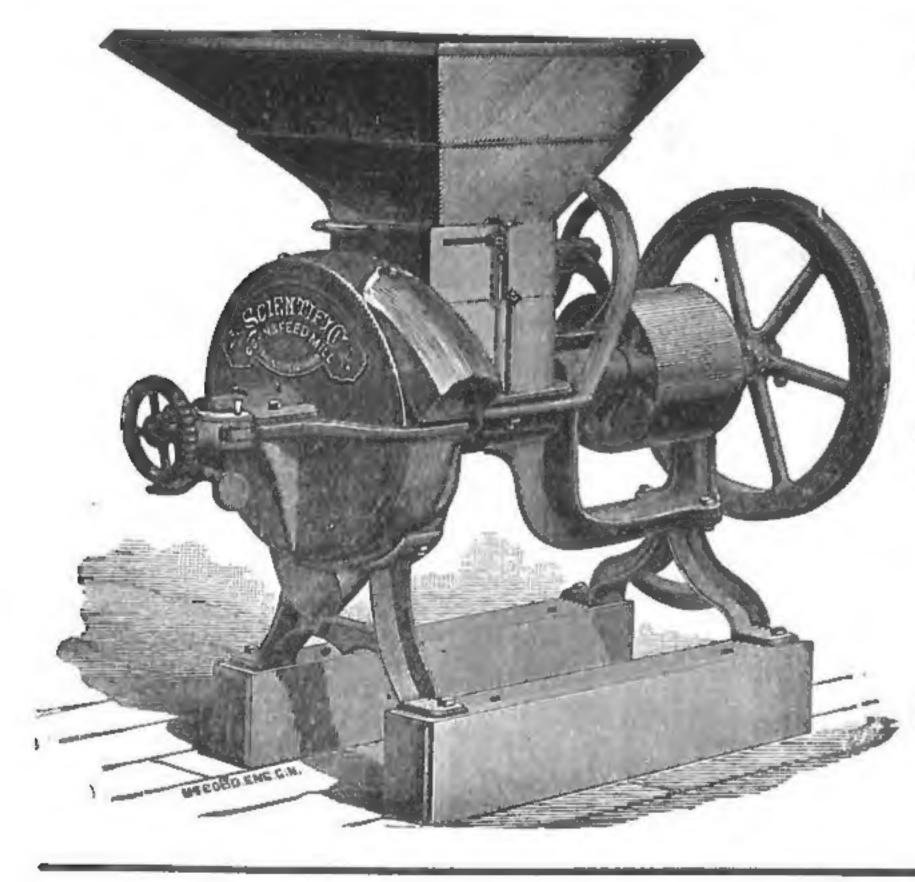
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